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ABSTRACT

The purpose of this systems project was to devise a competency-based system for the preparation of teachers, supervisors, and administrators in the field of vocational and applied arts education. Two major activities were accomplished in the first year of the project, including: (1) the design of a pre-certification instructional system, and (2) the design, documentation, and initial testing of a management information system. During the second year of the project, three major objectives have been established, including: (1) the implementation of the pre-certification instructional system, (2) the design of a Master of Education program, and (3) continued field testing and maintenance of the management information system. A listing of project personnel and a discussion of the instructional and management information systems are appended. Two booklets describing the competency-based teacher education instructional systems are available as VT 019 883 and VT 019 884 in this issue. (SB)

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ED 076748

PROGRESS REPORT

1971-1972

A Systems Approach to Vocational Teacher Education

Wayne State University
College of Education
Department of Vocational and Applied Arts Education

Fred S. Cook, Project Director

Funded By:

Michigan Department of Education

VT 019 885

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Introduction

The purpose of this project is to devise a system that will produce competent "directors of learning." The specific objectives are to develop, test, implement, evaluate, and disseminate item one of VAE's mission statement: Develop a system for the preparation of teachers, supervisors, and administrators in the field of Vocational and Applied Arts Education.

The specific objectives for implementing these systems were scheduled during a three-year period. For the first year, it was indicated that five major objectives related to the Instructional System would be accomplished. These fifteen categories were broken down into 178 events.

Eighty-seven per cent of these events will be completed by June 30, 1972. This work has been accomplished because of the continuing support of the VAE faculty, special consultants from a variety of disciplines throughout the country, and a full time systems staff. (See Appendix I for a listing of these persons).

The chart below outlines the primary project objectives for the 1971-1972 year and the status of each task. The status falls into one of the following categories:

1-Tasks completed as of 5-1-72

2-Tasks completed as of 6-30-72

3-Tasks completed as of 8-1-72 in preparation for Fall implementation

4-Tasks to be begun and substantially completed during 1972-1973

Summary

The first year of the VAE Systems Project has accomplished two major activities:

1) the design of the VAE pre-certification Instructional System
2) the design, documentation, and initial field testing of the Management Information System

During the second year, three major objectives have been established:

1) the implementation of the pre-certification Instructional System
2) the design of the VAE M.ED program
3) continued field testing and maintenance of the Management Information System.

Appendix I

Personnel
1971-1972

VAE SYSTEMS STAFF

Director
Fred S. Cook

Instructional System
Rita C. Richey

Management Information System
Charlotte L. Neuhauser

Research Assistants
Arthur Deane, Industrial Education
Shirley Kehr, Management Information System
Betty Moy, Business and Distributive Education
Dolores Schlesinger, Family Life Education

VAE FACULTY

Barkoski, Lois
Bateson, Willard
Baysinger, Gerald
Cook, Fred S.
Herschelmann, Kathleen
Johnson, Tommie
LaChapelle, Bette
Lanham, Frank
McMillan, Marian
Neuhauser, Charlotte
Popovich, John
Sechrest, Charles
Silvius, G. Harold

Consultants

Daniel Brown, Macomb County Community College
Division of Business Administration

Francis Brown, Systems Analyst
School of Business Administration
Wayne State University

Thomas Burford, Department of Instructional Technology
Wayne State University

Donald Cegala, Department of Communications
Florida State University

Calvin J. Cotrell, Center for Vocational & Technical Training
Ohio State University

James Dearing, Chairman, Department of Business Education
Detroit Public Schools

William Hulle, Iowa State University

Robert Neuhauser, Chairman, Department of Science
Farmington Public Schools

Blaine Parkinson, College of Education
Weber State College
Ogden, Utah

Albert Stahl, Coordinator, Assessment and Self-Renewal Unit
Wayne State University

Gary Smith, Systems Analyst
Department of Elementary Education
Wayne State University

Appendix II

Instructional System

WAYNE STATE UNIVERSITY
College of Education
Detroit, Michigan

Department of Vocational
and Applied Arts
Education

Curriculum Areas:
Business and Distributive
Family Life
Industrial

A MODEL FOR A COMPETENCY-BASED INSTRUCTIONAL SYSTEM[1]

Competency or performance based instructional programs are being widely discussed, and, at times, implemented in teacher education programs.[2] The following model describes a systems approach to teacher education which utilizes the tenets of competency-based instruction. This position paper describes the elements of the instructional system and the procedures that will be followed to develop and implement the system. The development of this competency-based system has been funded as a three year project, June, 1971, by the Michigan Department of Education as an initial phase of its effort to establish competency-based teacher certification procedures. The system will prepare teachers, supervisors,and administrators of Vocational and Applied Arts. The system will have two major components 1) an instructional system (described in this paper), and 2) a management information system (a paper outlining the major parts of this system is in process).

This competency-based instructional program has five elements--competencies, performance objectives, needs assessment, delivery systems, and evaluation. Each component is closely related to the others and together they form the bases of programs which provide for accountability.

---

[1]Prepared by Fred S. Cook, Director, VAE Systems Project and Rita C. Richey, Research Associate, VAE Systems Project.

[2]Elam, Stanley, "Performance-Based Teacher Education: What is the State of the Art?" American Association of Colleges for Teacher Education, December, 1971.

COMPETENCIES

When a person is competent, he has the necessary knowledge, skills, and judgment to perform a task effectively as measured by a given standard of performance.[3] Translated into the framework of a vocational teacher education program, a complete set of teacher competencies[4] would describe those skills which an effective vocational teacher could demonstrate.

The distinction between "performance" and "competency" is elusive. The literature and even groups actually working on competency-related projects were unable to provide a definition. Thus, a functional definition of "competency" was devised.

DEFINITION: A competency is a skill[4] which the student will demonstrate at a pre-determined proficiency level before initial and/or continuing certification.

Our actual list of competencies was based upon the first Cotrell list of competencies which resulted from a project at the Ohio State Center for Vocational and Technical Education.[5] However, this list was substantially modified by the Wayne State VAE faculty to reflect the emphases and concerns of our program. Adding, deleting, and changing terminology will probably be an essential process for each institution as it develops its own competency list.

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[3] Webster's Third New International Dictionary, (Springfield, Mass.: G & C Merriam Co., 1968), p. 463.

[4] Webster's Third New International Dictionary, (Springfield, Mass.: G & C Merriam Co., 1968), p. 2133

[5] The VAE Competencies are based upon the competencies listed in "Model Curricula for Vocational and Technical Teacher Education: Report No. 11 - General Objectives - Set 1", (Columbus, Ohio: The Center for Vocational and Technical Education, 1971) by Calvin J. Cotrell, et. al.

Finally, to prepare a competent teacher, it is necessary to analyze each competency, or skill, and identify its component parts. These parts become the specific performance objectives[6]--behaviorally written objectives for each facet of the teacher education program.[7]

PERFORMANCE OBJECTIVES

The performance objectives become the vehicles by which the competencies are embedded in the actual instruction.

Our performance objectives are written in terms of learning content only. They are not intended to specify the delivery systems a professor must use to achieve these objectives. By eliminating mention of anything related to the teaching process the behavioral objectives form the curriculum parameters of a competency-based system without infringing upon the rights of the professor to alter means of achieving the specified ends.

---

[6]"Performance Objectives" is used synonymously with behavioral objectives, performance goals, and instructional objectives.

[7]The VAE performance objectives have been formulated by following the Model presented in Behavioral Objectives and Instruction by Robert J. Kibler, Larry L. Barker, and David T. Miles (Boston, Mass.: Allyn and Bacon, Inc. 1970). Three kinds of objectives are developed - general educational objectives, informational objectives, and planning objectives. The general educational objectives are broad and non-behavioral. Informational objectives have these specified components.

1) Who is to perform the desired behavior
2) Actual Behavior to be demonstrated
3) The Result or Product of the behavior which will be evaluated

The planning objectives have the three components of the informational objectives plus two more:

4) The Relevant Conditions under which the behavior is to be performed.
5) The Standard or Criteria used to evaluate the performance.

Thus, the variables of student characteristics, faculty expertise, and available facilities, as well as a desire to try something new can still be recognized. The objectives become the common thread throughout each course offering, regardless of the instructor, or when the course is taught. In this way specified objectives of the graduating students are always established, but the variety of approaches, an asset of a diverse faculty, is still maintained.

RELATIONSHIP BETWEEN COMPETENCIES AND PERFORMANCE OBJECTIVES

Competencies and performance objectives are related. The mastery of several performance objectives would enable the student to demonstrate a competency. To illustrate, below is one of the competencies of an effective VAE teacher, and at least two of the performance objectives that must be mastered to demonstrate this competency.

Competency:

Determine student needs and goals.[8]

Performance Objectives:

1. Using the VAE list of methods (includes methods which each intern must use at least once during the intern teaching experience), the intern will experiment with a variety of methods and the techniques for making them effective which have been selected to meet the interests, needs, and abilities of the individual student. This list will be provided at the start of the intern teaching experience. Seventy-five percent of the methods listed and all of the required methods must be used in the intern teaching experience at least once.

---

[8]Cotrell, Calvin J., et. al., "Model Curricula for Vocational and Technical Teacher Education: Report No. 11 - General Objectives - Set I" (Columbus, Ohio: The Center for Vocational and Technical Education, 1971), p. 12.

2. Through his involvement in large or small seminar groups the intern will discuss his strategy for planning differentiated assignments to provide for individual differences. The intern may use as a basis for the discussion, strategies

   a. used by the cooperating teacher.
   b. currently being implemented in the classroom or laboratory by the intern.
   c. used by other teachers the intern has observed.
   d. incorporated into methods and techniques selected and experimented with as part of objective number two.

   As part of his discussion the intern will state how cognitive, psychomotor, and affective learning activities are incorporated into the intern's strategies for planning differentiated assignments to provide for individual differences.

Thus, the competency is general and program-related and the performance objectives are specific and course related.

Our master list of competencies will be used to check the content validity of the instruction. This will be accomplished by matching a group of performance objectives to each competency on the list.

NEEDS ASSESSMENT

Needs assessment in this design will include testing of both exit and prerequisite skills. The exit test, given before instruction, can determine which performance objectives the student has already mastered. If the student can demonstrate a portion of the skills, instruction will be provided for the remaining skills. If the student demonstrates his mastery of all of the objectives, then he can immediately exit from that part of the system and receive credit without putting in "seat time".

The test of prerequisite skills is the next major category of pre-instruction diagnosis. Before a student begins any portion of the instructional sequence he must demonstrate that he possesses those skills upon which the instruction is based. The prerequisite skills are identified through a process of 1) sequencing the course objectives and 2) conducting a task analysis to break down each behavior into the major component parts.

Both course specific prerequisites and general program prerequisites are identified. And two types of test instruments result. There is the short rather specific test which may cover, for example, a concept taught in a previous course upon which this instruction is dependent. These prerequisite skill tests may be administered at the beginning of a course or a unit.

The second, more general type of prerequisite skill test may be administered upon admission to the department. Here skills which are deemed to be crucial to the entire program are tested. For example, these skills may include basic written and oral communication abilities.

DELIVERY SYSTEM

No attempt is being made to standardize the delivery system to be used in the instructional program. These are the prerogative of the individual professors. The design of this instructional system allows the continued use of the many existing modes of instruction: lectures, small group discover, microteaching activities, field experiences, etc.

However, the department has agreed implicitly and explicitly that the competencies need not be attained through formal courses. In an effort to try out other instructional methods (or delivery systems) some courses in the undergraduate program are being taught using individualized learning kits. Students are self-paced and a variety of learning experiences are incorporated into each kit. Films, seminars, microteaching, slide-tape programs, and individual conferences are some aspects of the instruction.

EVALUATION

Evaluation consists of two major processes--1) exit test at the end of instruction to determine if the student has then mastered each performance objective, and 2) a follow-up of the student as he demonstrates these skills on the job. These two processes comprise the basis for feedback into the system and subsequent revision.

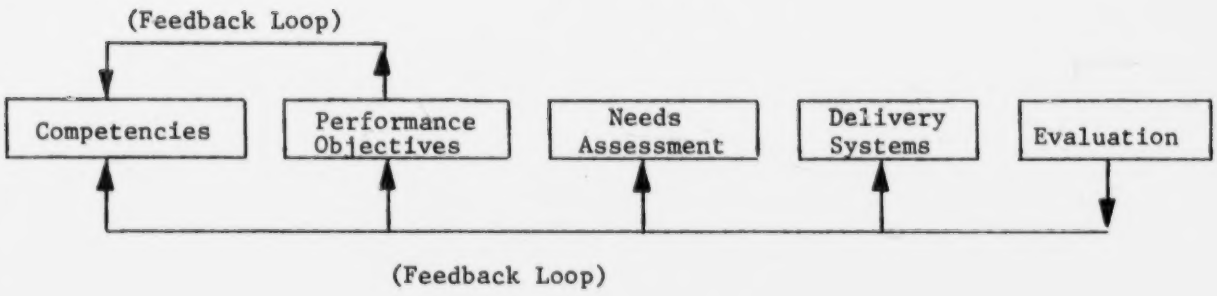
The evaluation process is initiated during the try-out period for each subsystem. Test performance, student reactions, faculty reactions — all become input change before the instruction continues. For those courses which are trying-out individualized leafning kits, the students' self-reported work time data becomes crucial to both overall course design and specific learning experiences. However, the most important program evaluation will be based upon the follow-up studies of graduates, and subsequently of the students of these newly certified teachers.

SUMMARY

This model of a competency-based instructional system consists of five major elements--competencies, performance objectives, needs assessment, delivery systems, and evaluation. Figure 1 below illustrates the entire design.

Figure 1

A Competency-Based
Instructional System



All parts of the instructional system are based on competencies--skills which the student will demonstrate at a pre-determined proficiency level before initial and/or continuing certification.

INSTRUCTIONAL SYSTEM PROGRESS CHART

(AS OF 30 JUNE 1972)

TYPE OF COURSE	COURSE	OBJECTIVES	EXIT TEST	COURSE STRUCTURE CHART	PREREQUISITE SKILLS TEST
GENERAL PROFESSIONAL EDUCATION	5191*				
	5925*				
	4192/7192				
	4193/7193				
BED/DED PROFESSIONAL	0231*				
	5131*				
	5133*				
FLE PROFESSIONAL	4141*				
	4143				
IED PROFESSIONAL	5187*				
	6187				
FLE TECHNICAL	5142				
	5143				
	5147				
	5148				
	6145				
IED TECHNICAL	1171*				
	2171*				
	3171*				

*Instructional materials are being developed.

DEVELOPMENT OF THE VAE
PRE-SERVICE COMPETENCIES

1. Identify 255 competenices developed by Calvin J. Cotrell in "Model Curricula for Vocational and Technical Teacher Education."

2. Systems Staff conducts literature review.

3. Systems Staff develops operational definition of "competency."

4. Faculty adds 29 items to the Cotrell competenices based upon specific VAE viewpoints and literature searches.

5. Faculty deletes 97 competencies identified as in-service or coordinator skills.

6. Faculty edits and consolidates the list to reflect VAE programs and terminology.

7. Faculty votes upon base pre-service competency list.

8. Faculty approves the process and procedures for future change of the competency list.

9. Sixty graduate students rate the pre-service competencies.

TEACHER COMPETENCIES

Organized into Categories

		Items	Page
A.	Planning Instruction*	1 - 21	1 - 2
B.	Executing Instruction	22 - 46	3
C.	Evaluating Instruction	47 - 54	4
D.	Guidance	55 - 65	5
E.	Management	66 - 74	6
F.	Public and Human Relations	75 - 78	7
G.	General School Activities	79 - 80	8
H.	Professional Role	81 - 88	9

*Categories Calvin J. Cotrell et. al,, "Model Curricula for Vocational and Technical Teacher Education: Report No. II, General Objectives--Set I," Columbus, Ohio: The Center for Vocational and Technical Education, 1971.

The teacher will:

1. identify from an occupational analysis, the skills and information to be taught in an appropriate occupation (c 3)

2. analyze a task or activity (c 4)

3. determine student needs and goals (c 5)
    - 3.1 help determine appropirate learning goals for individual learners, e.g. contract with the student for completion date and the nature of the product to be produced (232

4. formulate behavioral objectives for lessons, units, and courses (c 6)

5. select and develop instructional content for a course (c 6)

6. select and develop instructional content for a lesson (c 8)

7. determine in-school learning experiences (classroom and/or laboratory) (c 9)

8. select teaching strategies and delivery systems (c 10)
    - 8.1 determine optimal groupings of students for small group instruction (237)
    - 8.2 prescribe ways for the small group to accomplish its task (239)
    - 8.3 determine when large group instruction is appropriate for accomplishing instructional objectives (241)
    - 8.4 select the most appropriate means of conducting large group instruction, e.g. A-V equipment, lecture, chalkboard use, etc. (242)

9. select required tools, equipment, and supplies for a lesson (c 11)

10. determine instructional media and aids (c 12)

11. analyze and organize the sequence of learning tasks (skills, operations, procedures) (c 13 and c 22)

12. develop instructional untts (c 14)

13. construct a lesson plan (c 15)

14. plan the introduction of a lesson (c 16)

15. develop instructional material (information sheets, transparencies, bulletin board materials, etc,) (c 17)

16. identify out-of-school learning experiences (c 18)

17. determine the need for and identify resource persons (c 19)

18. determine appropriate library resources (c 20)

The teacher will:

19. develop a system for recording and filing subject matter information relevant to course planning (c 21)

20. design behavior modification systems which produce desired changes in classroom behavior, i.e. discipline (229)

21. prepare directions for a substitute teacher (248)

The teacher will:

22. introduce a lesson (c 23)

23. direct a group discussion (c 24)

24. conduct a field trip (c 25)

25. direct a student manipulative skill demonstration (c 26)

26. demonstrate a manipulative skill (c 28)

27. present a concept or principle through a demonstration (c 29)

28. give a lecture (c 30)

29. give an illustrated talk (c 31)

30. moderate a panel discussion (c 32)

31. employ the techniques of oral questioning (c 34)

32. recognize, interpret and utilize student actions and behavior, i.e. cues (c 35)

33. reinforce learning (c 36)

34. present study techniques (c 37)

35. develop standards for student attainment (c 38)

36. obtain closure for a lesson (c 39)

37. give an assignment for outside work, i.e. homework (c 40)

38. present information with the assistance of a resource person (c 41)

39. reproduce instructional material using appropriate available equipment (c 42, c 43, c 44)

40. set up display materials for instructional purposes (c 45)

41. present a lesson using appropriate multi-media equipment and material (c 46-c 52, c 54, c 55)

42. supervise student laboratory experiences (c 57)

43. supervise the use of individualized instructional equipment and materials

44. monitor small groups and identify any person or persons not working effectively in the group (238)

45. reinforce independent thinking more than rote memorization (245)

46. encourage "wholesome" attitude toward tools and equipment (247)

The teacher will:

47. evaluate textbooks and reference materials (c 59)

48. establish criteria for evaluation of lessons, units or courses (c 60)
    - 48.1 determine if evaluative criteria exist (c 76)
    - 48.2 select measures appropriate to the evaluative criteria (c 61)
        - 48.2.1 formulate essay test questions (c 62)
        - 48.2.2 formulate true-false test questions (c 63)
        - 48.2.3 formulate completion test items (c 64)
        - 48.2.4 formulate matching test items (c 65)
        - 48.2.5 formulate multiple-choice questions (c 74)
        - 48.2.6 formulate performance tests (c 66, c 75)
    - 48.3 establish criteria for student self-evaluation (c 78)
        - 48.3.1 direct student self-evaluation (c 69)
    - 48.4 administer tests (c 67)
    - 48.5 interpret evaluative data for students and parents (c73)

49. formulate a plan of grading consistent with school policy (c 68)

50. provide for the student's assessment of progress in class, home, and laboratory assignments (c 70)

51. evaluate techniques employed with teaching delivery systems and strategies (c 71)

52. evaluate classroom facilities and equipment (c 80)

53. monitor student progress and provide feedback (235)

54. develop means of assessing individual contributions or learning which results from small group work (240

The teacher will:

55. assemble, display, and present information on occupational areas (c 81, c 82, c 100)

56. cooperate with guidance counselor services (c 84)

57. arranges for and administers employment tests (c 85)

58. conduct student-parent conferences (c 88)

59. interpret cumulative student records (c 91)

60. assist students to develop study habits (c 93)

61. assist students with personal and social problems (c 94)

62. assist students with scholastic problems (c 95)

63. assist students with problems associated with furthering their education (c 96)

64. refer students to qualified personnel agencies for occupational and educational information (c 97)

65. devise means of determining student attitude (236)

The teacher will:

66. provide for the physical management of the learning environment
    - 66.1 arrange for storage of supplies and equipment (c 113)
    - 66.2 maintain tools and equipment (c 117)
    - 66.3 provide first aid supplies (c 119)
    - 66.4 arrange the mechanical details of the classroom and laboratory (materials and equipment) (c 142)
    - 66.5 control physical surroundings, e.g. light, ventilation, heat. (c 143)
    - 66.6 establish "check-out" procedures for tools, supplies and equipment (c 145)
    - 66.7 develop and administer a system for cleaning and maintaining the laboratory (c 146)
    - 66.8 schedule student's work station and his storage space in the laboratory or shop (c 147)

67. establish procedures with concern for the student's development
    - 67.1 provide for student-teacher establishment of standards of behavior (c 139)
    - 67.2 group students according to individual differences (c 140)
    - 67.3 maximize the use of student's time and the use of equipment, i.e. scheduling (c 141)
    - 67.4 develop and implement safety rpocedures as an integral part of instruction (c 118, c 212)
    - 67.5 plan and maintain policies for laboratory participation (c 144)

68. provide clerical management
    - 68.1 record and file student data, e.g. progress, performance, grades (c 131)
    - 68.2 record and file attendance reports on students (c 132)

69. arrange students for study and demonstration (249)

70. organize class at beginning of term (250)

71. establish order of business each day (252)

72. define the operating rules and responsibilities of both the learner and the teacher-manager (233)

73. make reparations for hostile acts in clear and appropriate fashion (243)

74. express displeasure in the act and not the person (244)

The teacher will:

75. interpret and promote career and vocational education within the school and community through oral and written communications (c 148)

76. develop good professional working relationships with the other teachers and the administration. (c 149)

77. develop good working relationships with school staff, e.g. secretaries, custodians, cafeteria workers, school nurse (c151)

78. practice appropriate social amenities (253)

The teacher will:

79. participate in non-instructional school activities, e.g. ticket collecting, chaperoning, and PTA (c 160)

80. serve as a member or chairman of a committee (c 161)

The teacher will:

81. demonstrate awareness of the purposes and programs of appropriate professional association (c 167)

82. keep abreast of professional developments, societal needs, and technological advances (c 172)

83. maintain expertise in his occupational speciality (c 173)

84. keep credentials file up to date (c 175)

85. demonstrate knowledge of the ethical procedures for moving from one position to another (c 176)

86. demonstrate good physical appearance (254)

87. practice personal hygiene habits (255)

88. use correct oral and written communication (251)

Competency Change Process

1. Competency change initiated on Competency Change Form
   --Change, deletion, or addition may come from faculty, students, community, deans, industry, etc.

2. Form sent to COPR C*
   --COPR C will meet twice monthly when Competency Change forms have been submitted.

3. COPR C reviews change
   --Will check for duplication in other part of program; will perform task analysis for results of change; will indicate need for additions or changes in performance objectives, other competencies, exit, and prerequisite tasks.

4. COPR C records findings on form and recommends acceptance/rejection

5. Form presented at next VAE staff meeting
   --Presented by COPR C member.

6. Vote to accept or reject competency change
   --Recommendation for acceptance or rejection will be by majority vote of those present.

7. Vote recorded on form

8. One copy of form sent to Administrative Committee (AC)

9. AC votes on acceptance or rejection of competency change
   --Acceptance or rejection will be by majority vote of those present.

10. AC records action on form

11. AC returns form to COPR C

12. A) If competency change <u>is not</u> accepted, COPR C files one copy in Competency Rejection file.

    B) If competency <u>is</u> accepted, COPR C takes appropriate action.
    -- If only one faculty member is involved in making change, he will be responsible for making change and reporting action taken to COPR C on Competency Change form. COPR C will review and determine adequacy of documentation.
    If COPR C determines there are any adequacies, the Competency Change form will be given back to the initiating party for revision.

* Competencies and Objectives Planning and Review Committee

13. COPR C documents action
    --COPR C will be responsible for getting change written up in suitable form for insertion or deletion from VAE Faculty Blue Book.

14. COPR C reports on documentation to staff
    --Reports to staff on final action and distributes documentation

15. COPR C files one copy in Competency Acceptance file
    --Assigns number when adding to file.

Competency Change Process

1. Change, deletion, or addition may come from faculty, students, community, deans, industry, etc.

2. COPR C will meet twice monthly when Competency Change forms have been submitted.

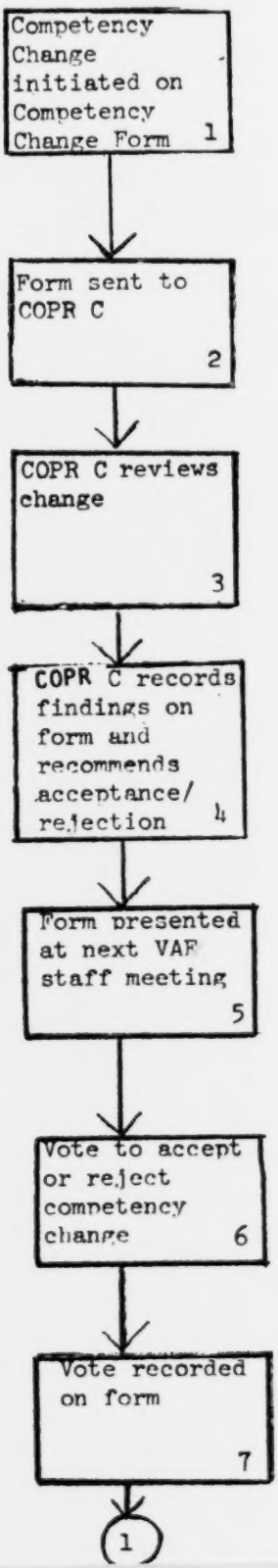
3. Will check for duplication in other part of program; will perform task analysis for results of change; will indicate need for additions or changes in performance objectives, other competencies, exit, and pre-requisite tasks.

---

5. Presented by COPR C member.

6. Recommendation for acceptance or rejection will be by majority vote of those present.

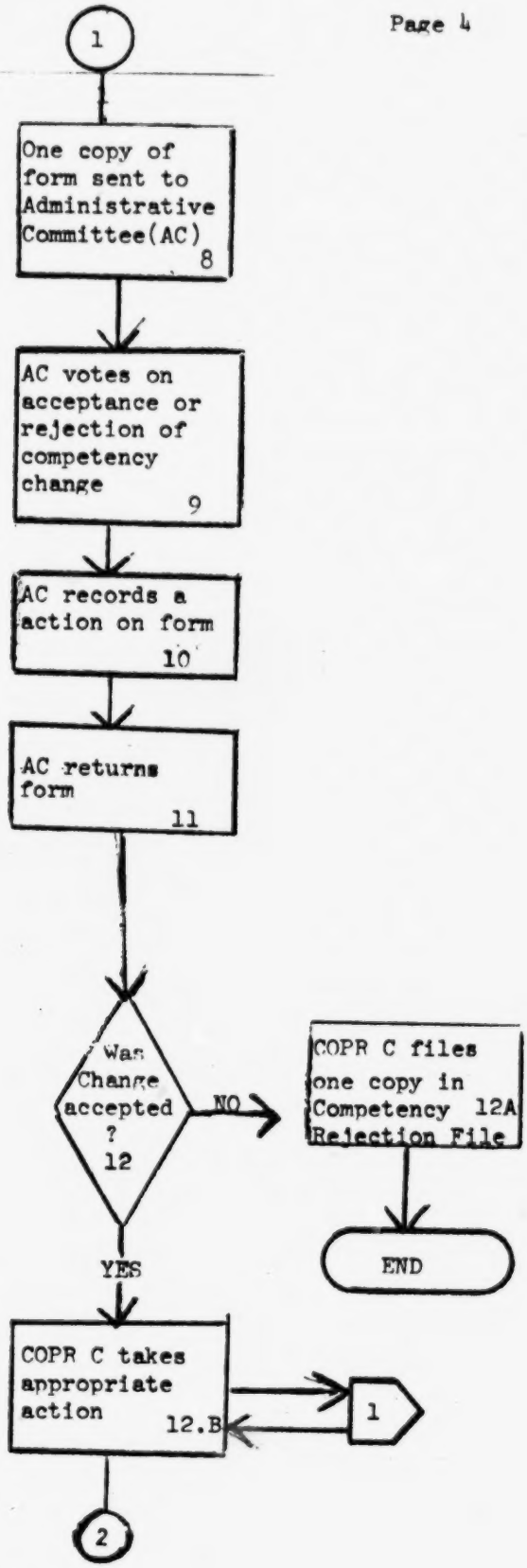
* Competencies and Objectives Planning and Review Committee


Competency Change initiated on Competency Change Form 1
Form sent to COPR C 2
COPR C reviews change 3
COPR C records findings on form and recommends acceptance/ rejection 4
Form presented at next VAE staff meeting 5
Vote to accept or reject competency change 6
Vote recorded on form 7
1

9. Acceptance or rejection will be by majority vote of those present.

12. B) If only one faculty member is involved in making change, he will be responsible for making change and reporting action taken to COPR C on Competency Change form. COPR C will review and determine adequacy of documentation.
If COPR C determines there are any adequacies, the Competency Change form will be given back to the initiating party for revision.

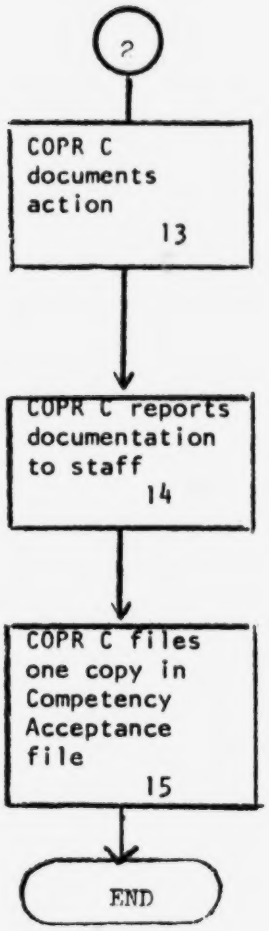
If more than one faculty member is involved, COPR C will determine who is involved and those involved (task force) will appoint a chairman. This task force will be responsible for making changes and will report to COPR C on the form the action taken. COPR C will review action for adequacy of documentation.


1
One copy of form sent to Administrative Committee(AC) 8
AC votes on acceptance or rejection of competency change 9
AC records a action on form 10
AC returns form 11
Was Change accepted ? 12
NO
COPR C files one copy in Competency Rejection File 12A
END
YES
COPR C takes appropriate action 12.B
1
2

13. COPR C will be responsible for getting change written up in suitable form for insertion or deletion from VAE Faculty Blue Book.

14. Reports to staff on final action and distributes documentation.

15. Assigns number when adding to file.



DEVELOPMENT OF THE VAE PERFORMANCE OBJECTIVES

1. Select format for performance objectives. Approved format outlined in Behavioral Objectives and Instruction by Robert Kibler, Larry Barker, and David Miles. Objectives written in three forms-general, informational, and planning.

2. Objectives written by systems staff member in consultation with individual faculty member currently responsible for that course. The following steps were guidelines during the development process:

    a. Obtain general objectives from faculty member.
    b. During a conference with faculty, specific questions are asked to provide additional input for writing.
    c. Draft of informational objectives written and approved by the professor during one or more conferences.
    d. Planning objectives written by adding conditions and criteria for evaluation. Approval obtained after necessary revisions.
    e. All objectives are written to reflect:

        1. learning content only
        2. terminal course objectives, not sub-steps
        3. no reference to delivery system or specific processes a professor might use to reach an objective
        4. no reference to one mandatory testing procedure (i.e., true-false questions)

3. Specific curriculum area objectives approved by faculty member currently responsible for given course then forwarded to curriculum area staff for discussion, approval, and revision if necessary.

4. General professional education objectives approved by VAE committee in charge of the development of that course. Approved objectives then forwarded to entire VAE staff for discussion, approval, and revision if necessary.

5. Procedures for changing performance objectives approved by VAE faculty. (n.b. All faculty members have the right to make recommendations for any objective change. The suggestions, however, must be agreed to by the entire faculty, since each professor also has the responsibility to adhere to the agreed upon objectives when teaching a given class.)

Prepared By:
Professor G. Harold Silvius
Systems Staff Member A. Deane

General Objectives
Approved April, 1972
Informational Objectives
Approved April, 1972
Planning Objectives
Approved April, 1972

VAE SYSTEMS PROJECT

VAE 5187
METHODS AND MATERIALS OF INSTRUCTION I

CURRENT BULLETIN DESCRIPTION

Pre-requisite: 5191, 5925

Practices and techniques for (1) organizing needed teaching plans and aids for a specific teaching situation, (2) securing needed data regarding students, (3) organizing class, (4) developing essential records, and (5) establishing a safety program.

The performance objectives for VAE 5187 have been grouped in the following categories:

I. PLANNING INSTRUCTION

II. PERTINENT STUDENT DATA

III. CLASSROOM/LABORATORY MANAGEMENT AND METHODS OF INSTRUCTION

IV. INSTRUCTIONAL MATERIALS

V. SAFETY

VI. PROFESSIONAL PERSONAL RELATIONSHIPS

GENERAL OBJECTIVES

I. PLANNING INSTRUCTION

In this professional methods course a person preparing to teach industrial education will investigate and develop aims for a course, the overall plan for a term's work, functional plans to use while teaching each unit, and suggested plans for a substitute teacher.

II. PERTINENT STUDENT DATA

In this professional methods course a person preparing to teach industrial education ascertains data needed about each student to project an individualized educational program with concern for such factors as interests, physical conditions to be noted, socio-economic background, previous industrial education experience, intelligence, and special aptitudes.

III. CLASSROOM/LABORATORY MANAGEMENT AND METHODS OF INSTRUCTION

In this professional methods course a person preparing to teach industrial education investigates the organizational patterns of successful industrial education teachers, methods, and techniques of instruction, and appropriate plans for classroom/laboratory management.

IV. INSTRUCTIONAL MATERIALS

In this professional methods course a person preparing to teach industrial education investigates available professional, text, and reference books, films, and other aids; and develops criteria for selecting or developing needed instructional materials and records to support units to be taught.

V. SAFETY

In this professional methods course a person preparing to teach industrial education identifies the elements of a safety education program as an integral and meaningful phase of the total instructional program, so students may develop wholesome attitudes toward observing safety precautions.

VI. PROFESSIONAL PERSONAL RELATIONSHIPS

In this professional methods course a person preparing to teach industrial education investigates those practices that result in wholesome relationships between

a. the instructor and individual students.
b. an instructor and his colleagues.
c. the instructor and groups of students.
d. the instructor and his profession.

INFORMATIONAL OBJECTIVES

I. PLANNING INSTRUCTION

1. The student will prepare a paper that outlines the course aims for a selected course in the projected teaching specialization.

2. Using the projected teaching specialization for the application, the student will prepare a written plan for a term's work that covers the identified typical lessons against a time distribution table.

3. The student will identify and define

    a. a plan of term's work.
    b. a unit teaching plan.
    c. a course of study.
    d. a session plan.
    e. a project teaching plan.

4. The student will develop a written format for unit teaching plans in the projected teaching specialization.

5. Using the projected teaching specialization as a basis for content selection and the unit plan format developed in objective #4, the student will develop a written unit teaching plan.

6. The student will develop an outline for a release giving directions for

    a. a professionally qualified substitute instructor in industrial education.
    b. an unqualified substitute instructor in industrial education.

7. The student will design and develop a teaching plan covering essential factors to be considered when enrolling a class and introducing the course at the beginning of a term.

II. PERTINENT STUDENT DATA

8. The student will identify the six general classifications of pertinent data needed to help each learner in industrial education to optimize an instructional program.

9. The student will investigate and analyze the cumulative record keeping procedures used by school systems and the individual industrial education teacher.

10. The student will design a written data collection instrument for collecting pertinent and essential informal data from each learner at the beginning of a course.

INFORMATIONAL OBJECTIVES

II. PERTINENT STUDENT DATA

11. The student will analyze possible learner handicaps that he probably will need to deal with in an industrial education laboratory.

III. CLASSROOM/LABORATORY MANAGEMENT AND METHODS OF INSTRUCTION

12. The student will design a record keeping system which could be adapted to future classroom/laboratory experiences.

13. Given a written list of specific reading assignments concerning the methods and materials of instruction in industrial education, the student will read and analyze the assigned materials.

14. The student will identify and distinguish between the three most common methods for moving students through a multiple activity program.

15. Given a list of the advantages and disadvantages of the three most common methods for moving students in multiple activity programs, the student will identify one advantage and one disadvantage for each method.

16. The student will identify the factors which must be taken into consideration when planning for a multiple activity shop or laboratory instructional program.

17. The student will develop a plan for a written session order of business for a specific teaching situation in industrial education.

18. The student will design and develop a written organizational system for a student directed organization which could be implemented in a future class.

19. The student will analyze various methods and techniques for enrolling a class at the beginning of the term.

20. The student will analyze methods and techniques of instruction.

21. The student will design a system for the accounting of student attendance during school hours.

INFORMATIONAL OBJECTIVES

IV. INSTRUCTIONAL MATERIALS

22. The student will develop written criteria for evaluating text, reference, and visual materials.

V. SAFETY

23. The student will identify and list in outline form the general safety precautions for an industrial education course.

24. The student will prepare in written outline form the safety instruction for a selected machine.

25. The student will prepare a safety test on the safety instruction previously developed for a selected machine.

26. The student will identify the general safety factors which make a laboratory a safe place to work.

27. The student will classify selected types of fires and the kinds of extinguishers needed for each type of fire.

28. The student will analyze and identify correct first aid procedures for typical laboratory injuries.

29. The student will analyze the various facets of teacher liability.

VI. PROFESSIONAL PERSONAL RELATIONSHIPS

30. The student will be given the opportunity to actively participate in a leadership role through performance of class activities.

31. The student will actively participate on one or more committees scheduled to make presentations to the class.

32. The student will analyze the process involved in identifying the activities of industrial education teachers.

PLANNING OBJECTIVES

I. PLANNING INSTRUCTION

1. Given an organizational format, the student will prepare a paper that outlines the course aims for a selected course in the projected teaching specialization.* The aims will communicate the scope and purpose of the selected course to prospective learners in the course. The aims will include

    a. the values promulgated for the instruction.
    b. the relationships that exist between the specific course and the total curriculum.
    c. what the course prepares the learner to do or to elect later in an educational sequence.

    *(e.g. Aircraft and Engine Mechanic, Die Designer, Welder, or Wood technology)

2. Using the projected teaching specialization for the application, the student will prepare a written plan for a term's work that outlines the identified typical lessons against a time distribution table.

    The examples on pages 72-79 in Teaching Successfully should be used by the student as a guide for the preparation of the term plan. The term plan will include

    a. major topics for the term.
    b. the allowable time for each topic.

    As an option the student may also include

    a. specific assignments or activities for each topic.
    b. text or supplementary materials.
    c. method(s) of instruction for each topic.

3. Given a list of correct and incorrect definitions, the student will identify and define

    a. a plan for a term's work.
    b. a unit teaching plan.
    c. a course of study.
    d. a session plan.
    e. a project teaching plan.

    The student should use the text Teaching Successfully as a reference for learning about the scope of these plans. Since knowledge of all of these plans is essential to an industrial education teacher, a score of 100 per cent should be achieved on a unit examination which deals with the above aspects of planning

PLANNING OBJECTIVES

I. PLANNING INSTRUCTION

4. Using the typical points (identified on pages 86-95 of Teaching Successfully) included in functional unit plans as guidelines and any additional points that may be necessary for a particular specialization, the student will develop a written format for unit teaching plans in the projected teaching specialization. Topic #6 in Teaching Successfully along with student selected references should be used as a guide for the development of a format.

5. Using the projected teaching specialization as a basis for content selection and the unit plan format developed in objective #4, the student will develop a written unit teaching plan which includes a preface describing the specific teaching situation for which the unit plan has been designed. Topic #6 in Teaching Successfully along with student selected references should be used as a guide for the development of the unit teaching plan. A project teaching plan may be developed as a unit teaching plan.

6. Using the content of the projected teaching specialization and Topic #7 in Teaching Successfully as a resource, the student will develop an outline for a release giving directions for

    a. a professionally qualified substitute instructor in industrial education.
    b. an unqualified substitute instructor in industrial education.

    The outline will include the factors identified on pages 100-107 of Teaching Successfully. The outline of directions will include a preface describing the subject and teaching situation.

7. Using a projected teaching assignment for a specific teaching situation, the student will design and develop a teaching plan covering essential factors (as specified by headings in Topic #13 of Teaching Successfully) to be considered when enrolling a class and introducing the course at the beginning of a term. The plan will include a preface describing the specific teaching situation for which the plan has been designed.

II. PERTINENT STUDENT DATA

8. Using Topic #2 of Teaching Successfully as a source, the student will identify the six general classifications of pertinent data needed to help each learner in industrial educational to optimize an instructional program. The general classifications for these pertinent data include

    a. individual interests.
    b. physical conditions.

PLANNING OBJECTIVES

II. PERTINENT STUDENT DATA

8. c. socio-economic background.
   d. previous industrial education experience.
   e. measures of general intelligence.
   f. special aptitudes.

   When given a list of specific pertinent data, the student will classify these under one of the six general classifications of pertinent data listed above.

9. Using Topic #8 of Teaching Successfully the student will investigate and analyze the cumulative record keeping procedures used by school systems and the individual industrial education teacher.

   The student's comprehension of cumulative record's procedures will be evaluated by the course examination.

10. Using Topic #2 of Teaching Successfully and student selected reference materials, the student will design a written data collection instrument for the projected teaching specialization. The purpose of this instrument is for collecting pertinent and essential informal data from each learner at the beginning of a course. The format of the instrument is up to the descretion of the student. It should not be more than 2 pages in length.

11. Using Topic #3 of Teaching Successfully and current reference materials, the students will analyze possible learner handicaps that they will probably need to deal with in an industrial education laboratory. These would include consideration for learners who are left handed or with

    a. defective vision.
    b. impaired hearing.
    c. a speech defect.
    d. a crippled condition.
    e. poor mental health.

    The students' ability to analyze a given situation involving student handicaps will be evaluated on the course examination.

PLANNING OBJECTIVES

III. CLASSROOM/LABORATORY MANAGEMENT AND METHODS OF INSTRUCTION

12. Using the projected teaching specialization and the text, Teaching Successfully, as a guide, the student will design a total record keeping system which could be adapted to future classroom/laboratory experiences. This record keeping system should include

    a. class books.
    b. individual progress charts.
    c. accident reports.
    d. safety records.
    e. informal pertinent data concerning students.
    f. other pertinent records which the student feels are needed to administer the projected teaching specialization.

    The format for the record keeping system will follow the form of a standard written outline. The outline will include a preface that describes the learning situation for which the record keeping system has been designed.

13. Given a written list of specific reading assignements concerning the methods and materials of instruction in industrial education, the student will read and analyze the assigned text materials. At the conclusion of the course a course examination will be given to evaluate the student's comprehension of the assigned readings.

14. Given a list of possible definitions, the student will identify and distinguish between the three most common methods for moving students through a multiple activity program. These methods as specified in Topic #8 of Managing Multiple Activities, include

    a. group rotation.
    b. individual rotation.
    c. individual progression.

15. Given a list of the advantages and disadvantages of the three most common methods for moving students in multiple activity programs, the student will identify one advantage and one disadvantage for each method. These methods, as specified in Topic #8 of Managing Multiple Activities include

    a. group rotation.
    b. individual rotation.
    c. individual progression.

PLANNING OBJECTIVES

III. CLASSROOM/LABORATORY MANAGEMENT AND METHODS OF INSTRUCTION

16. The student will identify the factors to be taken into consideration when establishing an organizational plan for a multiple activity shop or laboratory. The factors, as specified in Topic #16 of Managing Multiple Activities include the

    a. instructional program to be offered.
    b. number of major activities to be carried on.
    c. maximum number of students in any one class.
    d. essential tools and equipment for a laboratory.
    e. floor space needed for each area.
    f. required work stations.
    g. needed service equipment.
    h. storage facilities.

    The identification of these factors will be accomplished from a written list of laboratory planning items and items which are unrelated to laboratory planning.

17. Using the projected teaching specialization and Topic #12 of Teaching Successfully the student will develop a written session order of business for a specific teaching situation in industrial education.

    In developing the order of business the following purposes should be kept in mind. The purpose of an order of business for each session is to

    a. establish an order for carrying out the organizational activities during a typical class session. (i.e. supplies and tools, calling class to order, checking on presence of designated class officers, safety inspection, program for group instruction, and clean up.)
    b. set up a system so each student can carry out responsibilities and perform the designated work successfully with a minimum of assistance.
    c. provide appropriate time each period for manipulative or laboratory work.
    d. prevent group discipline problems through student organization and participation.
    e. plan the class routine so no student will become lost or isolated.

PLANNING OBJECTIVES

III. CLASSROOM/LABORATORY MANAGEMENT AND METHODS OF INSTRUCTION

18. Using the projected teaching specialization, page 329 of Teaching Successfully, and Topic #5 & #6 of Managing Multiple Activities, the student will design and develop a written organizational system for a student directed organization which could be implemented in a future class or laboratory.

The student directed organizational system will include provision for

a. student involvement in managing the organization of the instructional program.
b. factors that determine the kind and extent of an organization.
c. student participation in planning the organization.
d. procedure for establishing the organization.
e. making the directions for each class officer self-explanatory.
f. selecting the class officers.
g. the term of office of each member of the student organization.
h. giving credit to students who work in student organization.
i. substitutes for absent class officers.
j. assisting class officers with their responsibilities

The format for the student organizational system will follow standard outline form. The outline should include a preface that describes the teaching situation for which the organizational system has been designed.

19. The student will analyze various methods and techniques for enrolling a class at the beginning of the term. Topic #13 of Teaching Successfully and periodicals should be used in this analytical study. The students comprehension of the methods and techniques discussed in Topic #13 will be evaluated by the course examination.

20. Keeping in mind the projected teaching specialization and Part 6 of Teaching Successfully, the student will analyze methods and techniques of instruction for

a. arranging students for group instruction and independent study.
b. arranging students for demonstrations.
c. team teaching in industrial education.
d. providing student team activity.
e. giving a demonstration to large and small groups.
f. giving lectures.
g. using the discussion method.

PLANNING OBJECTIVES

III. CLASSROOM/LABORATORY MANAGEMENT AND METHODS OF INSTRUCTION

20.
h. using field trips for instructional purposes.
i. providing outside assignments.
j. providing instruction sheets.
k. supervised performance at the work station.
l. giving students independent research time.
m. using programmed instruction.

The student's comprehension of the methods and techniques outlined above will be evaluated by the course examination.

21. Using Topic #15 & #23 of Teaching Successfully and student selected periodicals as resources, the student will design a system for the accounting of students which takes into consideration the

a. practices to excuse and admit students to class.
b. development of wholesome attitudes towards tardiness or absence.
c. possibility of fire drills, nuclear or similar major catastrophes.

The system will be developed using a standard outline format. The written outline will include a preface that describes the learning situation for which the student accounting system has been designed.

IV. INSTRUCTIONAL MATERIALS

22. Using the projected teaching specialization and Topics #9 & #10 of Teaching Successfully as a guide, the student will develop written criteria for evaluating text, reference, and visual materials (transparencies, films, etc.) for a specific learning situation. The criteria will be written in standard outline format. The outline of criteria will include a preface briefly describing the learning situation for which the criteria have been developed.

V. SAFETY

23. Using the projected teaching specialization and pages 400-405 of Teaching Successfully as a guideline, the student will identify and list in outline form the general safety precautions for a specific industrial education course. These precautions include

a. good personal habits which eliminate accidents.

PLANNING OBJECTIVES

V. SAFETY

23. b. general activities that relate to working conditions.
c. general precautions applicable to all tools and machines.

24. Using the example of safety instruction for the engine lathe on pages 408-411 of Teaching Successfully, the student will prepare in written outline form the safety instruction for a machine that would be included in the laboratory equipment of the projected teaching specialization.

25. Using the outline of safety instruction developed for objective #24 the student will prepare a safety test on the safety instruction previously developed for a selected machine. The test that is developed will include multiple choice and true-false test items. A key showing the correct answers to the questions is to be developed also.

26. The student will identify the general safety factors whcch make a laboratory a safe place to work. Factors which must be considered when attempting to eliminate potential causes of accidents include

a. dull or broken tools.
b. building defects.
c. electrical equipment.
d. operator's zones.
e. redesigning tools and machines for safety.
f. color and its effect on safety.
g. a school shop safety inspection check list.

The student's ability to correctly identify all of these factors will be evaluated through the course examination.

27. Given the information covered in Topic #24 of Teaching Successfully and 8 examples of types of fires, the student will identify each fire according to one of the following classes and indicate the type of extinguisher needed to control the fire.

a. class A
b. class B
c. class C
d. class D

The student's comprehension of the various classes of fires will be evaluated by the course examination.

V. SAFETY

28. The student will analyze the correct first aid procedures to follow when giving aid to an injured person. Topic #25 of Teaching Successfully is to be used by the student as a basis for the analysis.

When given a list of typical shop related injuries, the student will identify the first aid procedure which the teacher should follow for each injury. Typical laboratory related injuries include

a. eye injuries.
b. foreign objects in the eye.
c. cuts or wounds.
d. bruises.
e. foreign objects under the skin.

The student's ability to identify correct first aid procedures will be evaluated by the course examination.

29. Using Topic #26 in Teaching Successfully as a resourse guide and the references listed on pages 486 and 487 of this text, the student will analyze the various facets of teacher liability. These facets include

a. school district liability.
b. teacher negligence and liability.
c. degree of teacher negligence.
d. liability insurance.
e. a sound safety program.

The student's comprehension of teacher liability will be evaluated by the course examination.

VI. PROFESSIONAL PERSONAL RELATIONSHIPS

30. The student will be given the opportunity to actively participate in a leadership role as he carries out his responsibilities to the class, himself, and committees. Leadership activities which the student may select include

a. serving as an associate to the professor.
b. serving as a session chairman.
c. serving as class officer.
d. serving as chairman of a special committee with defined objectives.

PLANNING OBJECTIVES

VI. PROFESSIONAL PERSONAL RELATIONSHIPS

31. Given the opportunity to select areas of interest for committee involvement, the student will actively participate on one or more committees scheduled to make presentations to the class. Evaluation of the student performance on a committee will take into consideration the

    a. organization of the presentaion.
    b. thoroughness with which the topic is covered.
    c. use of appropriate and effective methods and techniques of instruction.
    d. clarity of the student's ideas.
    e. fulfillment of the objectives for the presentation.
    f. use of visual aids
    g. student's teaching performance.
    h. professional appearance of the student.

    Using these factors as a basis for discussion, the student will participate in a self-evaluation session with other committee members and the professor to make judgements regarding the performance of each team member.

32. Using Topic #1 in Teaching Successfully as a resource, the student will analyze the process involved in identifying the activities of industrial education teachers. The student's comprehension of this process will be evaluated by the course examination.

The procedures for changing performance objectives have not been approved by the VAE faculty

Matching Performance Objectives to Competencies

(It is only through a final examination of the overall program in relationship to the stated competencies that one can be sure of the validity of each facet of instruction in the sequence.)

1. Systems Staff will make preliminary matches in terms of content between the approved performance objectives from all VAE pre-certification courses and those competencies on the approved pre-service list.

2. Faculty will approve all matches.

3. This matching process will isolate two items:
   a) Those course objectives without related competencies.
   b) Those competencies without objectives.

4. Then the entire VAE faculty must make curriculum decisions in regards to these "left over" competencies and objectives:
   a) Is the competency really legitimate? If not, it is deleted from the list. If it is appropriate, performance objectives must be written and placed into a course or courses.
   b) Is the performance objective really legitimate? If not, it is dropped from the course. If it is appropriate, an additional competency must be written.

5. Then final approval will be given to both the VAE Base Pre-Service List and the VAE pre-certification performance objectives.

DEVELOPMENT OF VAE
COURSE STRUCTURE CHARTS

1. Establish course parameters via General Objectives.

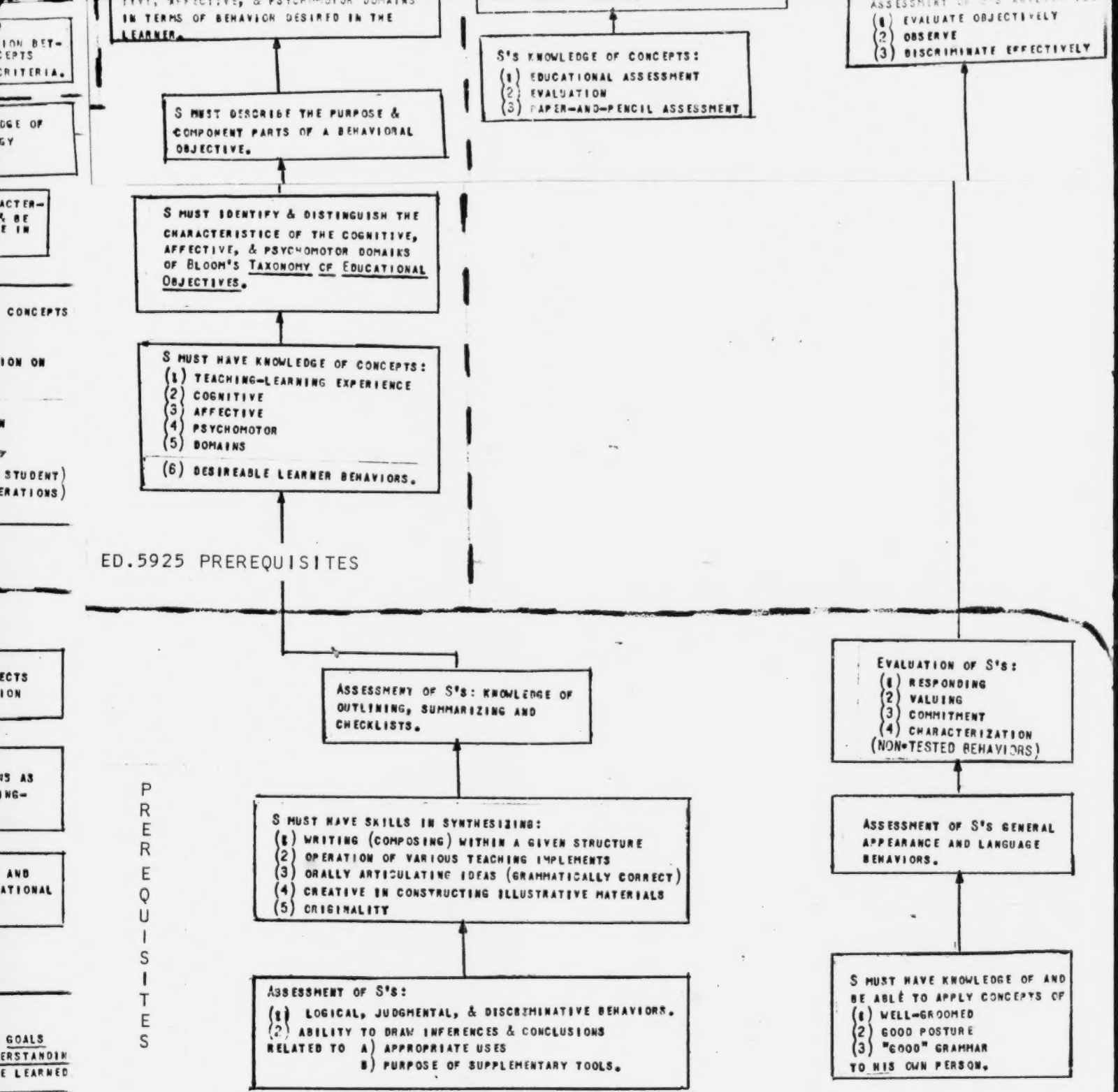
2. Group Informational Objectives under General Objectives.

3. "Break down" informational objectives to establish the component skills which one must have in order to meet each objective.

4. Show hierarchy of skills and knowledge by arranging behaviors from complex down to the simple.

5. Identify the connections between component behaviors to provide information for initial sequencing decisions.

6. One primary use of this chart is to visualize the course content and structure. The relationships between courses and several components within one course are made apparent.

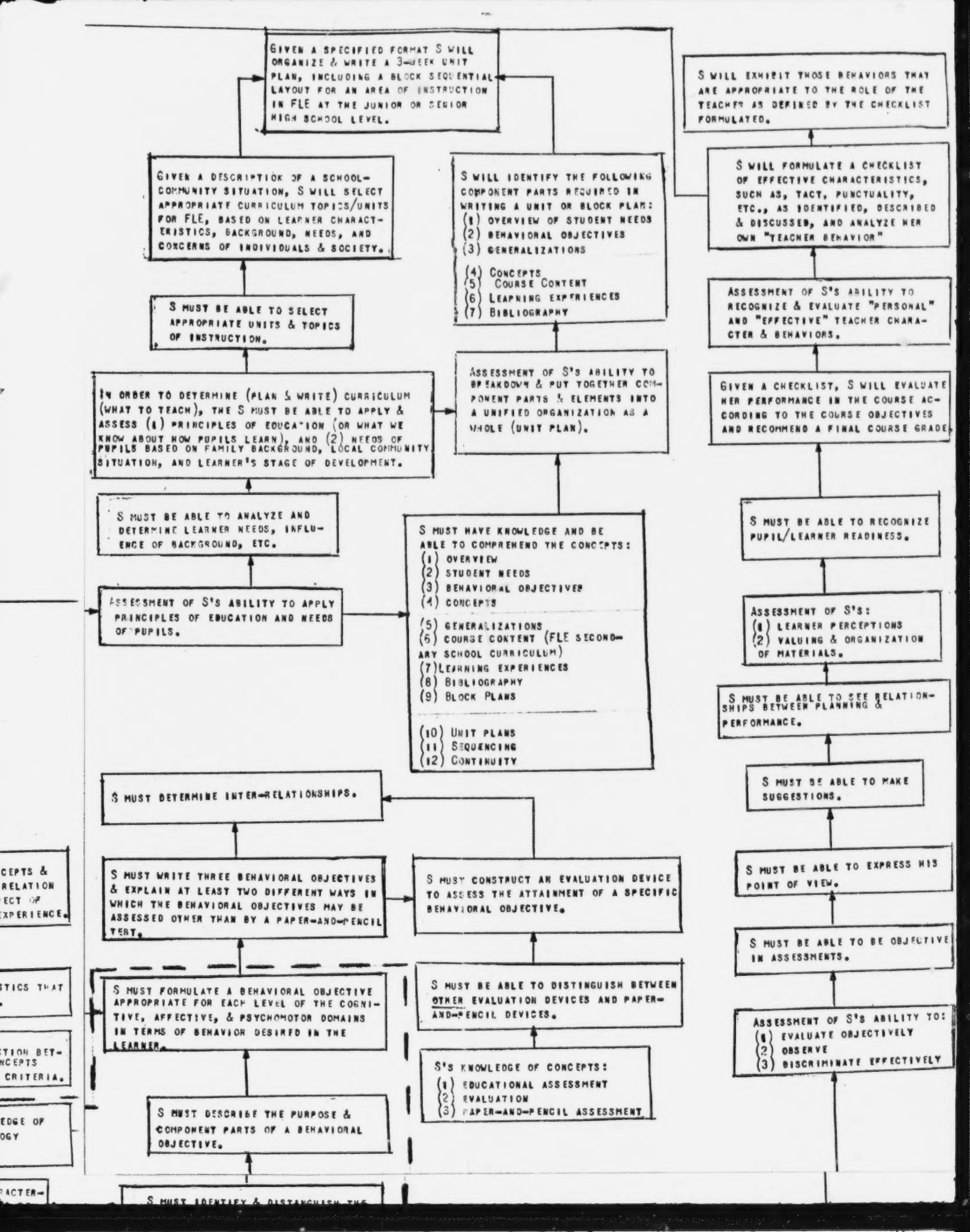

IN TERMS OF BEHAVIOR DESIRED IN THE LEARNER.
S'S KNOWLEDGE OF CONCEPTS:
(1) EDUCATIONAL ASSESSMENT
(2) EVALUATION
(3) PAPER-AND-PENCIL ASSESSMENT
(1) EVALUATE OBJECTIVELY
(2) OBSERVE
(3) DISCRIMINATE EFFECTIVELY
S MUST DESCRIBE THE PURPOSE & COMPONENT PARTS OF A BEHAVIORAL OBJECTIVE.
S MUST IDENTIFY & DISTINGUISH THE CHARACTERISTICS OF THE COGNITIVE, AFFECTIVE, & PSYCHOMOTOR DOMAINS OF BLOOM'S TAXONOMY OF EDUCATIONAL OBJECTIVES.
S MUST HAVE KNOWLEDGE OF CONCEPTS:
(1) TEACHING-LEARNING EXPERIENCE
(2) COGNITIVE
(3) AFFECTIVE
(4) PSYCHOMOTOR
(5) DOMAINS
(6) DESIREABLE LEARNER BEHAVIORS.
ED.5925 PREREQUISITES
ASSESSMENT OF S'S: KNOWLEDGE OF OUTLINING, SUMMARIZING AND CHECKLISTS.
EVALUATION OF S'S:
(1) RESPONDING
(2) VALUING
(3) COMMITMENT
(4) CHARACTERIZATION
(NON-TESTED BEHAVIORS)
PREREQUISITES
S MUST HAVE SKILLS IN SYNTHESIZING:
(1) WRITING (COMPOSING) WITHIN A GIVEN STRUCTURE
(2) OPERATION OF VARIOUS TEACHING IMPLEMENTS
(3) ORALLY ARTICULATING IDEAS (GRAMMATICALLY CORRECT)
(4) CREATIVE IN CONSTRUCTING ILLUSTRATIVE MATERIALS
(5) ORIGINALITY
ASSESSMENT OF S'S GENERAL APPEARANCE AND LANGUAGE BEHAVIORS.
ASSESSMENT OF S'S:
(1) LOGICAL, JUDGMENTAL, & DISCRIMINATIVE BEHAVIORS.
(2) ABILITY TO DRAW INFERENCES & CONCLUSIONS
RELATED TO A) APPROPRIATE USES
B) PURPOSE OF SUPPLEMENTARY TOOLS.
S MUST HAVE KNOWLEDGE OF AND BE ABLE TO APPLY CONCEPTS OF
(1) WELL-GROOMED
(2) GOOD POSTURE
(3) "GOOD" GRAMMAR
TO HIS OWN PERSON.

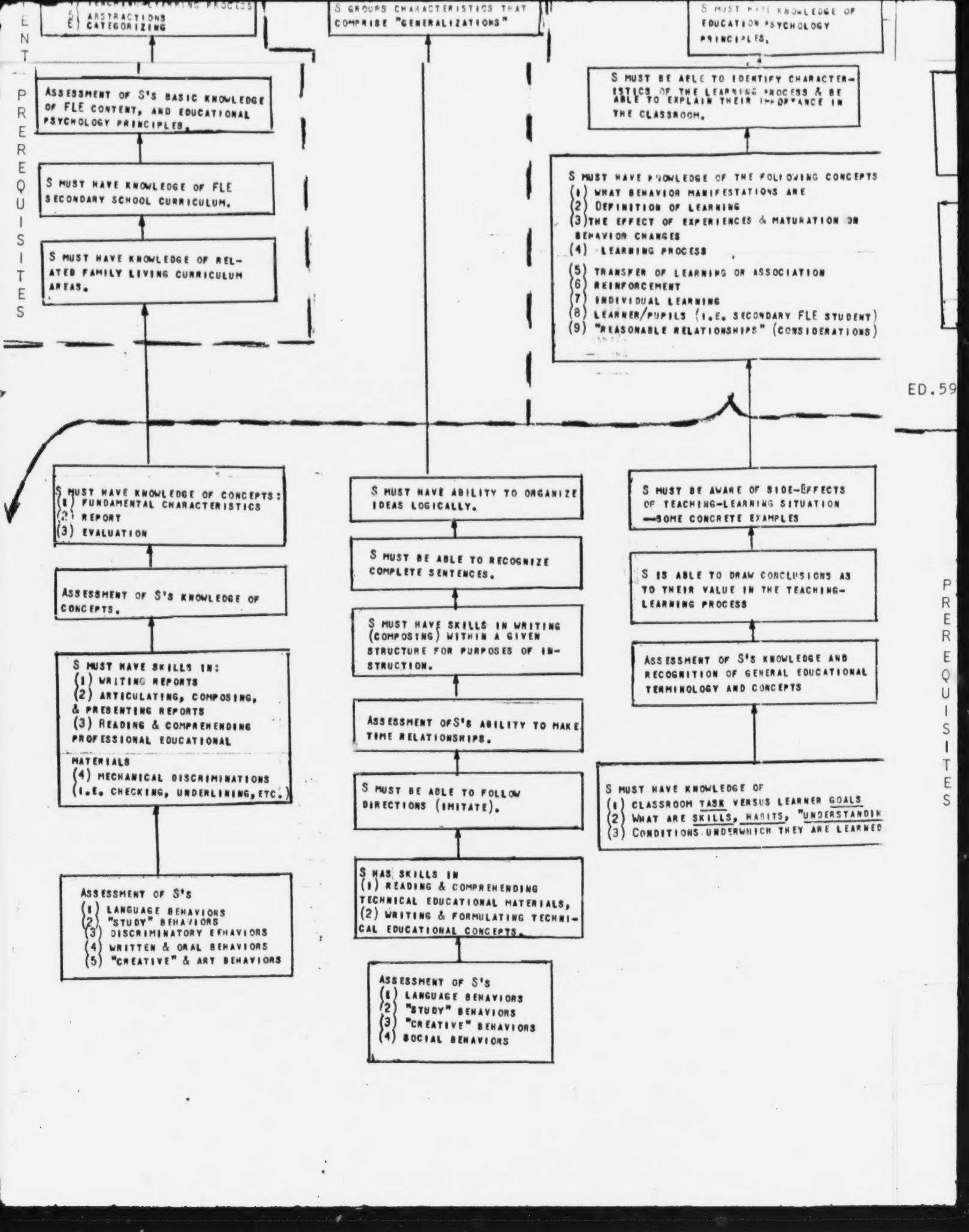
COURSE STRUCTURE CHART
VAE 4141

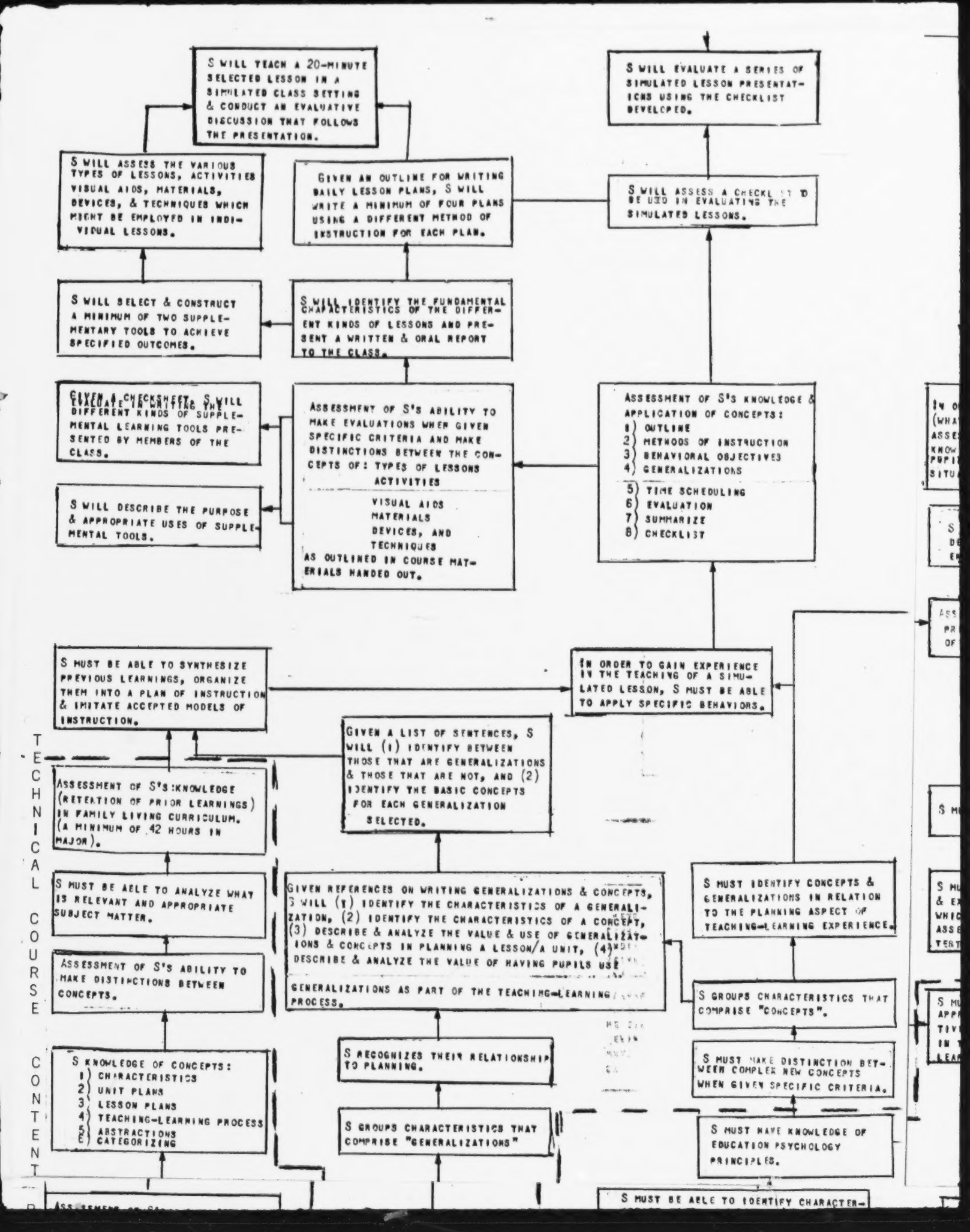
Methods and Materials of Teaching Homemaking and Family Living

D. Schlesinger,

Systems Staff


Given a specified format S will organize & write a 3-week unit plan, including a block sequential layout for an area of instruction in FLE at the junior or senior high school level.
S will exhibit those behaviors that are appropriate to the role of the teacher as defined by the checklist formulated.
Given a description of a school-community situation, S will select appropriate curriculum topics/units for FLE, based on learner characteristics, background, needs, and concerns of individuals & society.
S will identify the following component parts required in writing a unit or block plan:
(1) overview of student needs
(2) behavioral objectives
(3) generalizations
(4) Concepts
(5) Course Content
(6) Learning experiences
(7) Bibliography
S will formulate a checklist of effective characteristics, such as, tact, punctuality, etc., as identified, described & discussed, and analyze her own "teacher behavior"
S must be able to select appropriate units & topics of instruction.
Assessment of S's ability to recognize & evaluate "personal" and "effective" teacher character & behaviors.
In order to determine (plan & write) curriculum (what to teach), the S must be able to apply & assess (1) principles of education (or what we know about how pupils learn), and (2) needs of pupils based on family background, local community situation, and learner's stage of development.
Assessment of S's ability to breakdown & put together component parts & elements into a unified organization as a whole (unit plan).
Given a checklist, S will evaluate her performance in the course according to the course objectives and recommend a final course grade.
S must be able to analyze and determine learner needs, influence of background, etc.
S must have knowledge and be able to comprehend the concepts:
(1) overview
(2) student needs
(3) behavioral objectives
(4) concepts
(5) generalizations
(6) course content (FLE secondary school curriculum)
(7) Learning experiences
(8) Bibliography
(9) Block Plans
(10) Unit plans
(11) Sequencing
(12) Continuity
S must be able to recognize pupil/learner readiness.
Assessment of S's ability to apply principles of education and needs of pupils.
Assessment of S's:
(1) learner perceptions
(2) valuing & organization of materials.
S must be able to see relationships between planning & performance.
S must determine inter-relationships.
S must be able to make suggestions.
S must write three behavioral objectives & explain at least two different ways in which the behavioral objectives may be assessed other than by a paper-and-pencil test.
S must construct an evaluation device to assess the attainment of a specific behavioral objective.
S must be able to express his point of view.
S must be able to be objective in assessments.
S must formulate a behavioral objective appropriate for each level of the cognitive, affective, & psychomotor domains in terms of behavior desired in the learner.
S must be able to distinguish between other evaluation devices and paper-and-pencil devices.
Assessment of S's ability to:
(1) evaluate objectively
(2) observe
(3) discriminate effectively
S's knowledge of concepts:
(1) educational assessment
(2) evaluation
(3) paper-and-pencil assessment
S must describe the purpose & component parts of a behavioral objective.
S must identify & distinguish the


PREREQUISITES
5) ABSTRACTIONS
6) CATEGORIZING
S GROUPS CHARACTERISTICS THAT COMPRISE "GENERALIZATIONS"
S MUST HAVE KNOWLEDGE OF EDUCATION PSYCHOLOGY PRINCIPLES.
ASSESSMENT OF S'S BASIC KNOWLEDGE OF FLE CONTENT, AND EDUCATIONAL PSYCHOLOGY PRINCIPLES.
S MUST BE ABLE TO IDENTIFY CHARACTERISTICS OF THE LEARNING PROCESS & BE ABLE TO EXPLAIN THEIR IMPORTANCE IN THE CLASSROOM.
S MUST HAVE KNOWLEDGE OF FLE SECONDARY SCHOOL CURRICULUM.
S MUST HAVE KNOWLEDGE OF THE FOLLOWING CONCEPTS
(1) WHAT BEHAVIOR MANIFESTATIONS ARE
(2) DEFINITION OF LEARNING
(3) THE EFFECT OF EXPERIENCES & MATURATION ON BEHAVIOR CHANGES
(4) LEARNING PROCESS
(5) TRANSFER OF LEARNING OR ASSOCIATION
(6) REINFORCEMENT
(7) INDIVIDUAL LEARNING
(8) LEARNER/PUPILS (I.E. SECONDARY FLE STUDENT)
(9) "REASONABLE RELATIONSHIPS" (CONSIDERATIONS)
S MUST HAVE KNOWLEDGE OF RELATED FAMILY LIVING CURRICULUM AREAS.
ED.59
S MUST HAVE KNOWLEDGE OF CONCEPTS:
(1) FUNDAMENTAL CHARACTERISTICS
(2) REPORT
(3) EVALUATION
S MUST HAVE ABILITY TO ORGANIZE IDEAS LOGICALLY.
S MUST BE AWARE OF SIDE-EFFECTS OF TEACHING-LEARNING SITUATION —SOME CONCRETE EXAMPLES
ASSESSMENT OF S'S KNOWLEDGE OF CONCEPTS.
S MUST BE ABLE TO RECOGNIZE COMPLETE SENTENCES.
S IS ABLE TO DRAW CONCLUSIONS AS TO THEIR VALUE IN THE TEACHING-LEARNING PROCESS
S MUST HAVE SKILLS IN:
(1) WRITING REPORTS
(2) ARTICULATING, COMPOSING, & PRESENTING REPORTS
(3) READING & COMPREHENDING PROFESSIONAL EDUCATIONAL MATERIALS
(4) MECHANICAL DISCRIMINATIONS (I.E. CHECKING, UNDERLINING, ETC.)
S MUST HAVE SKILLS IN WRITING (COMPOSING) WITHIN A GIVEN STRUCTURE FOR PURPOSES OF INSTRUCTION.
ASSESSMENT OF S'S KNOWLEDGE AND RECOGNITION OF GENERAL EDUCATIONAL TERMINOLOGY AND CONCEPTS
ASSESSMENT OF S'S ABILITY TO MAKE TIME RELATIONSHIPS.
S MUST HAVE KNOWLEDGE OF
(1) CLASSROOM TASK VERSUS LEARNER GOALS
(2) WHAT ARE SKILLS, HABITS, "UNDERSTANDIN
(3) CONDITIONS UNDERWHICH THEY ARE LEARNED
S MUST BE ABLE TO FOLLOW DIRECTIONS (IMITATE).
ASSESSMENT OF S'S
(1) LANGUAGE BEHAVIORS
(2) "STUDY" BEHAVIORS
(3) DISCRIMINATORY BEHAVIORS
(4) WRITTEN & ORAL BEHAVIORS
(5) "CREATIVE" & ART BEHAVIORS
S HAS SKILLS IN
(1) READING & COMPREHENDING TECHNICAL EDUCATIONAL MATERIALS,
(2) WRITING & FORMULATING TECHNICAL EDUCATIONAL CONCEPTS.
ASSESSMENT OF S'S
(1) LANGUAGE BEHAVIORS
(2) "STUDY" BEHAVIORS
(3) "CREATIVE" BEHAVIORS
(4) SOCIAL BEHAVIORS
PREREQUISITES


S WILL TEACH A 20-MINUTE SELECTED LESSON IN A SIMULATED CLASS SETTING & CONDUCT AN EVALUATIVE DISCUSSION THAT FOLLOWS THE PRESENTATION.
S WILL EVALUATE A SERIES OF SIMULATED LESSON PRESENTATIONS USING THE CHECKLIST DEVELOPED.
S WILL ASSESS THE VARIOUS TYPES OF LESSONS, ACTIVITIES VISUAL AIDS, MATERIALS, DEVICES, & TECHNIQUES WHICH MIGHT BE EMPLOYED IN INDIVIDUAL LESSONS.
GIVEN AN OUTLINE FOR WRITING DAILY LESSON PLANS, S WILL WRITE A MINIMUM OF FOUR PLANS USING A DIFFERENT METHOD OF INSTRUCTION FOR EACH PLAN.
S WILL ASSESS A CHECKLIST TO BE USD IN EVALUATING THE SIMULATED LESSONS.
S WILL SELECT & CONSTRUCT A MINIMUM OF TWO SUPPLEMENTARY TOOLS TO ACHIEVE SPECIFIED OUTCOMES.
S WILL IDENTIFY THE FUNDAMENTAL CHARACTERISTICS OF THE DIFFERENT KINDS OF LESSONS AND PRESENT A WRITTEN & ORAL REPORT TO THE CLASS.
GIVEN A CHECKSHEET, S WILL EVALUATE IN CRITIQUE THE DIFFERENT KINDS OF SUPPLEMENTAL LEARNING TOOLS PRESENTED BY MEMBERS OF THE CLASS.
ASSESSMENT OF S'S ABILITY TO MAKE EVALUATIONS WHEN GIVEN SPECIFIC CRITERIA AND MAKE DISTINCTIONS BETWEEN THE CONCEPTS OF: TYPES OF LESSONS ACTIVITIES VISUAL AIDS MATERIALS DEVICES, AND TECHNIQUES AS OUTLINED IN COURSE MATERIALS HANDED OUT.
ASSESSMENT OF S'S KNOWLEDGE & APPLICATION OF CONCEPTS: 1) OUTLINE 2) METHODS OF INSTRUCTION 3) BEHAVIORAL OBJECTIVES 4) GENERALIZATIONS 5) TIME SCHEDULING 6) EVALUATION 7) SUMMARIZE 8) CHECKLIST
S WILL DESCRIBE THE PURPOSE & APPROPRIATE USES OF SUPPLEMENTAL TOOLS.
S MUST BE ABLE TO SYNTHESIZE PREVIOUS LEARNINGS, ORGANIZE THEM INTO A PLAN OF INSTRUCTION & IMITATE ACCEPTED MODELS OF INSTRUCTION.
IN ORDER TO GAIN EXPERIENCE IN THE TEACHING OF A SIMULATED LESSON, S MUST BE ABLE TO APPLY SPECIFIC BEHAVIORS.
GIVEN A LIST OF SENTENCES, S WILL (1) IDENTIFY BETWEEN THOSE THAT ARE GENERALIZATIONS & THOSE THAT ARE NOT, AND (2) IDENTIFY THE BASIC CONCEPTS FOR EACH GENERALIZATION SELECTED.
ASSESSMENT OF S'S KNOWLEDGE (RETENTION OF PRIOR LEARNINGS) IN FAMILY LIVING CURRICULUM. (A MINIMUM OF 42 HOURS IN MAJOR).
S MUST BE ABLE TO ANALYZE WHAT IS RELEVANT AND APPROPRIATE SUBJECT MATTER.
GIVEN REFERENCES ON WRITING GENERALIZATIONS & CONCEPTS, S WILL (1) IDENTIFY THE CHARACTERISTICS OF A GENERALIZATION, (2) IDENTIFY THE CHARACTERISTICS OF A CONCEPT, (3) DESCRIBE & ANALYZE THE VALUE & USE OF GENERALIZATIONS & CONCEPTS IN PLANNING A LESSON/A UNIT, (4) DESCRIBE & ANALYZE THE VALUE OF HAVING PUPILS USE GENERALIZATIONS AS PART OF THE TEACHING-LEARNING PROCESS.
S MUST IDENTIFY CONCEPTS & GENERALIZATIONS IN RELATION TO THE PLANNING ASPECT OF TEACHING-LEARNING EXPERIENCE.
ASSESSMENT OF S'S ABILITY TO MAKE DISTINCTIONS BETWEEN CONCEPTS.
S GROUPS CHARACTERISTICS THAT COMPRISE "CONCEPTS".
S KNOWLEDGE OF CONCEPTS: 1) CHARACTERISTICS 2) UNIT PLANS 3) LESSON PLANS 4) TEACHING-LEARNING PROCESS 5) ABSTRACTIONS 6) CATEGORIZING
S RECOGNIZES THEIR RELATIONSHIP TO PLANNING.
S MUST MAKE DISTINCTION BETWEEN COMPLEX NEW CONCEPTS WHEN GIVEN SPECIFIC CRITERIA.
S GROUPS CHARACTERISTICS THAT COMPRISE "GENERALIZATIONS"
S MUST HAVE KNOWLEDGE OF EDUCATION PSYCHOLOGY PRINCIPLES.
S MUST BE ABLE TO IDENTIFY CHARACTER-
TECHNICAL COURSE CONTENT

DEVELOPMENT OF VAE
TEST ITEMS

PREREQUISITE SKILL TESTS

1. Professors establish course entry level.

2. List skills prerequisite to entire VAE program.

3. List skills prerequisite to one specific course.

4. Write test items for course-specific prerequisite skills and obtain faculty approval. Tests may be either performance tests and/or paper and pencil tests.

EXIT TESTS

5. Two tests contructed -- a performance test and a paper and pencil test.

6. All test items are criterion-referenced.

7. Tests approved by VAE faculty member currently responsible for the given course.

SKILLS PRE-REQUISITE TO VAE PROGRAM

1. Written Communication
2. Reading Skills
3. Oral Communication
4. Listening Skills
5. Ability to Listen and Follow Directions

SKILLS PRE-REQUISITE TO 0231

1. Typing ability - 30 words a minute
2. Use of the Library
3. Analyze previous observations of classroom presentations
4. Write in behavioral terms
5. Write Behavioral Objectives
6. Define consumer education
7. Define career education
8. Interviewing and Questioning Skills

PRE-REQUISITE SKILLS TEST

FOR VAE 0231

1. List three major sources for finding instructional or research materials in business education.

   a.
   b.
   c.

2. From one of the above sources, write a detailed description of the steps you would go through to locate a research report on curriculum development in business education.

3. In what source would you look to find annotations of bibliographies?

4. In what source would you look to find instructional materials?

5. List the five components of a planning objective.

   a.
   b.
   c.
   d.
   e.

6. From the following list of behavioral objectives, check the objectives that are not planning objectives.

   _____ a. The student takes a three minute timing.

   _____ b. The student types a mailable copy of a letter from rough draft.

   _____ c. The student will demonstrate his knowledge of retailing arithmetic by solving problems on common fractions, addition, and subtraction.

   _____ d. Given a rough draft letter which contains a two column tabulation problem, the student will use the backroll backspace method to type the tabulation and produce a mailable copy of the letter.

   _____ e. The student takes a pretest to demonstrate his knowledge of the four basic skills in arithmetic.

   Correct the objectives you checked by supplying the parts that are missing and/or rewriting the incorrect parts.

7. A worker in the business community was interviewed about her job. She gave the following statements about one of her typing tasks.

> "My supervisor gives me a rough draft copy of a letter he has written. Then I go through the letter to see if there are any corrections that need to be made. In our office we make two copies of everything. One for us and one for the files upstairs in the main office. After the letter is typed I read it over to make sure there are no errors. Then I give it to my supervisor to have it signed. After it is signed, I type an envelope for the letter and put it in the outgoing tray. I send one copy of the letter upstairs and file one in our files. Then I throw away the rough draft copy my supervisor gave me to type from."

Rewrite her statements in behavioral terms so that a student in a beginning typewriting class will be able to follow the steps and perform the task.

8. Define "consumer education". How is this related to business education?

9. Define "career education". How is this related to business education?

10. List the guiding principles for carrying on an interview.

11. a. List the parts of an integrated, detailed lesson plan.

    b. From the attached lesson plans decide whether or not each lesson is detailed and integrated.

    c. If the lesson plan is not integrated, correct it by deleting and/or adding the appropriate part or parts.

12. Make arrangements with the instructor to view two video tapes of student-teacher interaction. After viewing each tape, analyze the teaching techniques employed by the teacher in terms of whether or not the teaching techniques were effective or ineffective.

PERFORMANCE TEST

13. Make arrangements with the instructor to take a three-minute corrected-words-a-minute timing. You must type at least 30 words a minute.

WRITTEN EXEMPTION TEST FOR VAE 0231

1. Using the attached format for a typewriting lesson plan, write a 40-minute integrated lesson plan for one of the following products:

    a. letter
    b. memorandum
    c. report
    d. outline

2. Write one terminal behavioral objective for a beginning typewriting class and the corresponding intermediate and daily behavioral objectives.

3. Select five areas of instruction from the list below and write an annotation (Turabian format) of one article in each area. The articles should relate to classroom experiments or practical experiences.

    a. home row keys
    b. numeric and special keys
    c. horizontal centering
    d. vertical centering
    e. tabulations
    f. letters and memos
    g. erasing
    h. crowding and spreading
    i. composing at the typewriter
    j. upper alphabetic keys

4. Write a summary of the important points of the typewriting method endorsed by one of the following authorities on typewriting:

    a. John L. Rowe
    b. Herbert A. Tonne
    c. Jerry W. Robinson
    d. Fred S. Cook

    If you are unable to summarize the ideas of one of the above authorities, read a typewriting methods book written by one of the authorities above and write a summary of the important ideas brought out in the book. The summary should be written in the Turabian annotation format.

5. From the following lines of material typed using a diatype, identify the lines and/or keys which are not typed at stroke level and describe the characteristics of an appropriate corrective drill to correct the stroking pattern.

1. The book looked rather shabby.

2. Th e bookk e ep er had mad e an error.

3. All records indicate a smaller amount.

4. Soon however the pretty secretary had corrected the error.

PERFORMANCE TEST FOR 0231

1. Type the following line of material using the diatype:

   You are learning the touch system for typewriting.

2. Type the answers to the six questions below in the following manner:

   a. Answer 2 of the questions in the form of a letter.
   b. Answer 2 of the questions in the form of a memorandum.
   c. Answer 2 of the questions as an edited rough draft copy.

   1) Describe the steps in presenting new alphabetic keys.

   2) Define what an ASA drill is. What is the rationale for the drill? What are the limitations and advantages of the ASA drill? How would you overcome the limitations?

   3) Describe the steps in presenting a two column tabulation lesson using the backroll and backspace method.

   4) What do you consider is the rationale for Thought Starters? Would this device improve or have no effect on the student's typewriting skill? Explain.

   5) Define and illustrate what is meant by an integrated lesson plan?

   6) What criteria would you use to evaluate students in a beginning typewriting class? How would you justify these criteria to a parent?

3. Design and reproduce 2 copies of one of the following on the Magnetic Card Selectric typewriter.

   a. form
   b. letter
   c. class handout

4. Make arrangements with the instructor to take a three-minute corrected-words-a-minute timing. You must be able to type at least 35 words a minute using the attached timed writing.

5. Make arrangements with the instructor to teach a 40-minute typewriting lesson using the lesson plan you have written.

6. Write an I-TIP (Individualized Task Instruction Packet) following the process outlined in the enclosed copy entitled "Individualized Task Instruction Packet (I TIP) Procedures." A copy of the interview form and a completed I-TIP is also attached. The I-TIP you write should include the following:

    a. the interview form
    b. a copy of the I-TIP
    c. a copy of the checking model for the I-TIP

TIMED WRITING

A SENSE OF HUMOR DOES MORE THAN ANY OTHER TRAIT TO ASSIST YOU IN 13
UNDERSTANDING AND ADJUSTING YOURSELF TO ALL SORTS OF PEOPLE. WHETHER OR 28
NOT IT IS AN ASSET THAT CAN BE ACQUIRED IF YOU ARE WITHOUT IT IS SOME- 42
THING THAT IS DIFFICULT TO DETERMINE. THERE IS NOTHING LIKE A SENSE OF 56
HUMOR TO LIGHTEN THE STRAIN OF THE PERPLEXING PROBLEMS THAT PLAGUE YOU. 71
IT WILL HELP YOU GET OVER DIFFICULT AND TIRESOME SITUATIONS IN AN EASIER 85
MANNER. STUDENTS YOUR AGE SHOULD NATURALLY SEE THE COMICAL AND LUDI- 99
CROUS; YOU SHOULD RECOGNIZE THE UNUSUAL AND GREET IT WITH A LAUGH. 112
....1....2....3....4....5....6....7....8....9....10....11....12....13

DEVELOPMENT OF VAE
INSTRUCTIONAL MODELS

1. The basic instructional system components provide the framework for each instructional model. These components are:

    1) competencies
    2) performance objectives
    3) needs assessment
    4) delivery systems
    5) evaluation

2. In addition, all models utilize a component data management system.

3. A variety of approaches and techniques have been developed and are being tried out. These include:

    a. self-instructional modules
    b. multi-media instruction
    c. new laboratory management procedures
    d. utilization of instructional aid
    e. procedures for scheduling teacher and/or student time
    f. varying room facilities
    g. new grouping of traditional courses
    h. new student data collection procedures

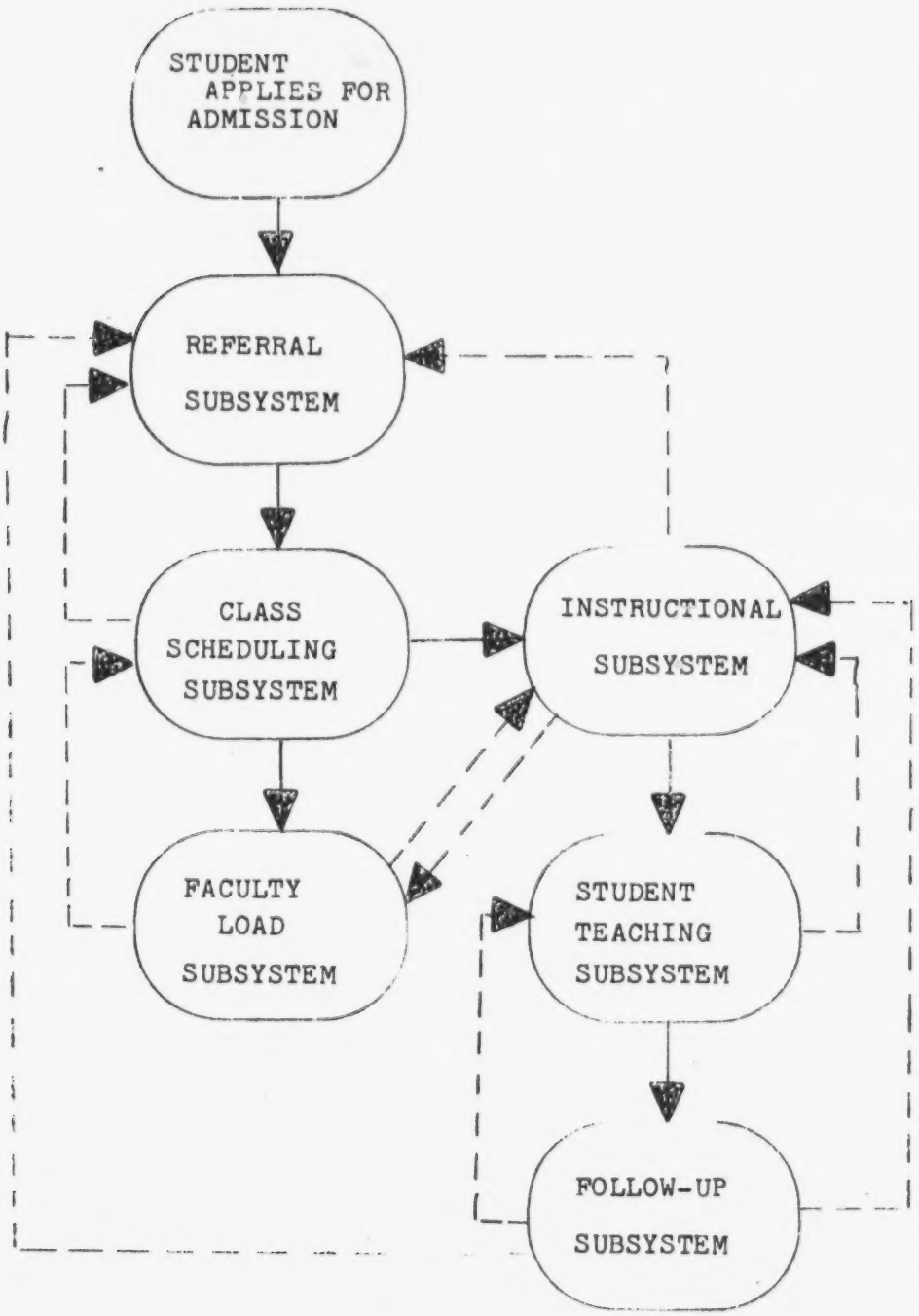
4. These result in the following models:

    a. individualized self-pacing instruction
    b. traditional instruction with new materials
    c. combination of individualized, small groups, and lecture
    d. individualized laboratory with structured lecture and demonstration

Appendix III

Management Information System

MAIN SUBSYSTEMS AND THEIR RELATIONSHIPS



MIS COMPUTER FILES AND THEIR CONTENTS

MASTER STUDENT FILE

- Admittance Date
- I.D.
- Name
- Address
- Telephone
- Sex
- Marital Status
- Birthdate
- College & Division
- Residency
- Curriculum
- Major
- Rank
- Cum. Honor Point Total
- Cum. Hours in Residence
- Cum. Total Hours
- Cum. Honor Point Base
- Vocational Certification
- Transcript of all courses taken since Jan., 1969
  - Term
  - Section
  - Course Number
  - Grade in Course
  - Withdrawal Code
  - Hours of Course
  - Subject of Course
  - Length of Course

MASTER FACULTY FILE

- I.D. of faculty member
- Name of faculty member
- Birthdate
- Education (degrees)
- Area of Specialization
- Major Teaching Area
- Preferences:
  - Course to teach
  - Number of hours to generate per quarter
  - Time of day to teach
- Service other than Teaching performed during year
- Organization Memberships
- Publications
- Courses taught per quarter
- Hours generated per quarter
- Total hours generated per year

PLAN OF WORK FILE

- I.D. of student
- Name of student
- Courses scheduled-term scheduled
- Work Experience
- Vocational Certification
- Expected graduation date

STUDENT TEACHER FILE

- I.D. of student
- Name of student
- Address
- Term student teaching
- WSU supervising teacher
- Final evaluation
- School where taught
- Area taught
- Level taught
- Cooperating teacher

COP FILE

Course Number
Objective per course
Kits per course

Parameters per course
- Quarters to be taught
- Maximum number of students
- Time of day to be taught
- Requirements of instructor

FOLLOW-UP FILE

Same information as Master Student File. When a student graduates or completes the program, he is moved from the Master Student File to this file.

PROGRAM EVALUATION FILE

Objective Number/Kit Number
I.D. of student
Name of student
Prerequisite Skills test score
Exit One Test Scores for each kit or objective
Date Started objective/kit
Accummulated Time on objective/kit
Date Ended
Post-Test Score per objective/kit
Course Number/Section Number

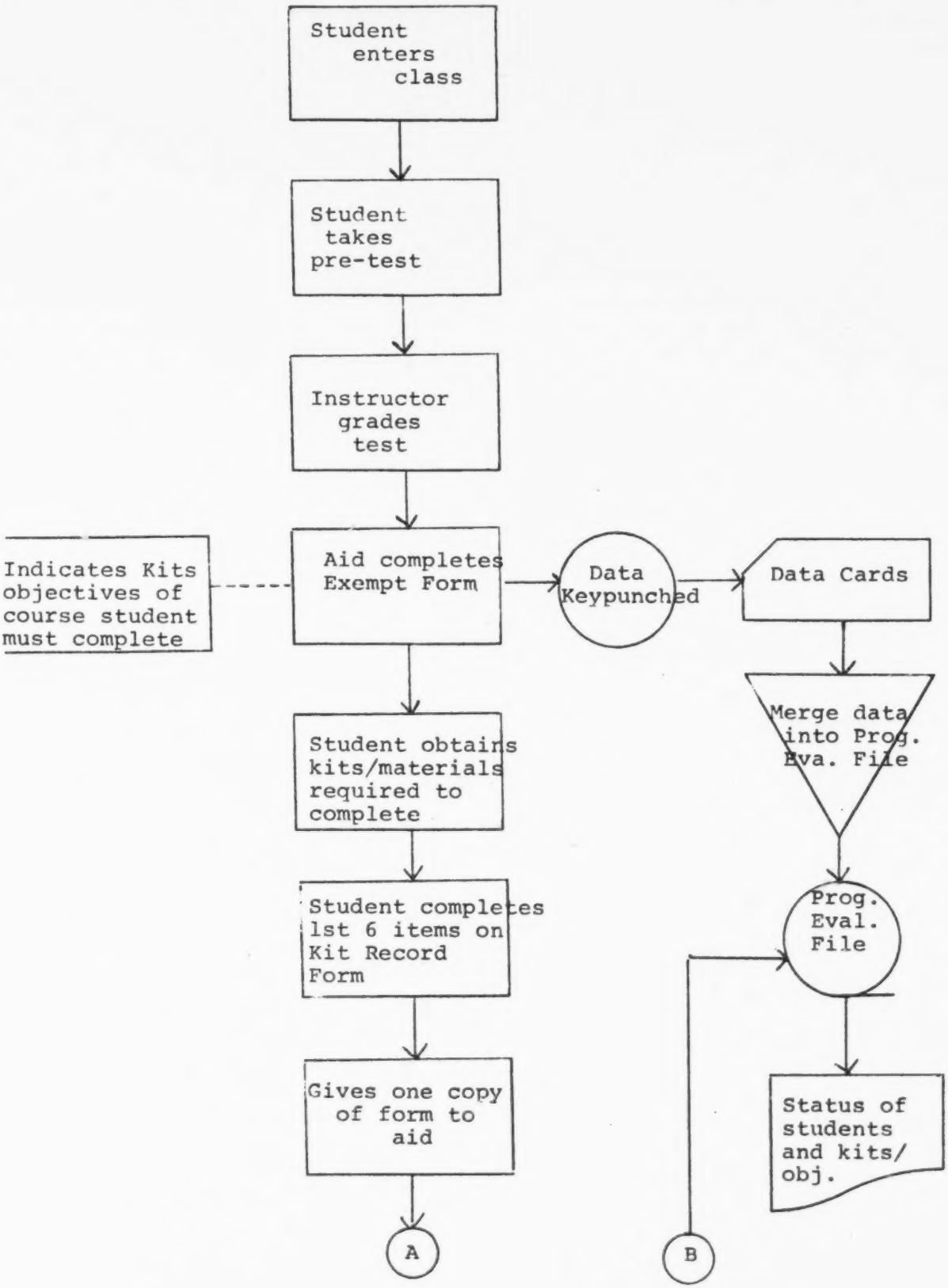
INACTIVE STUDENT FILE

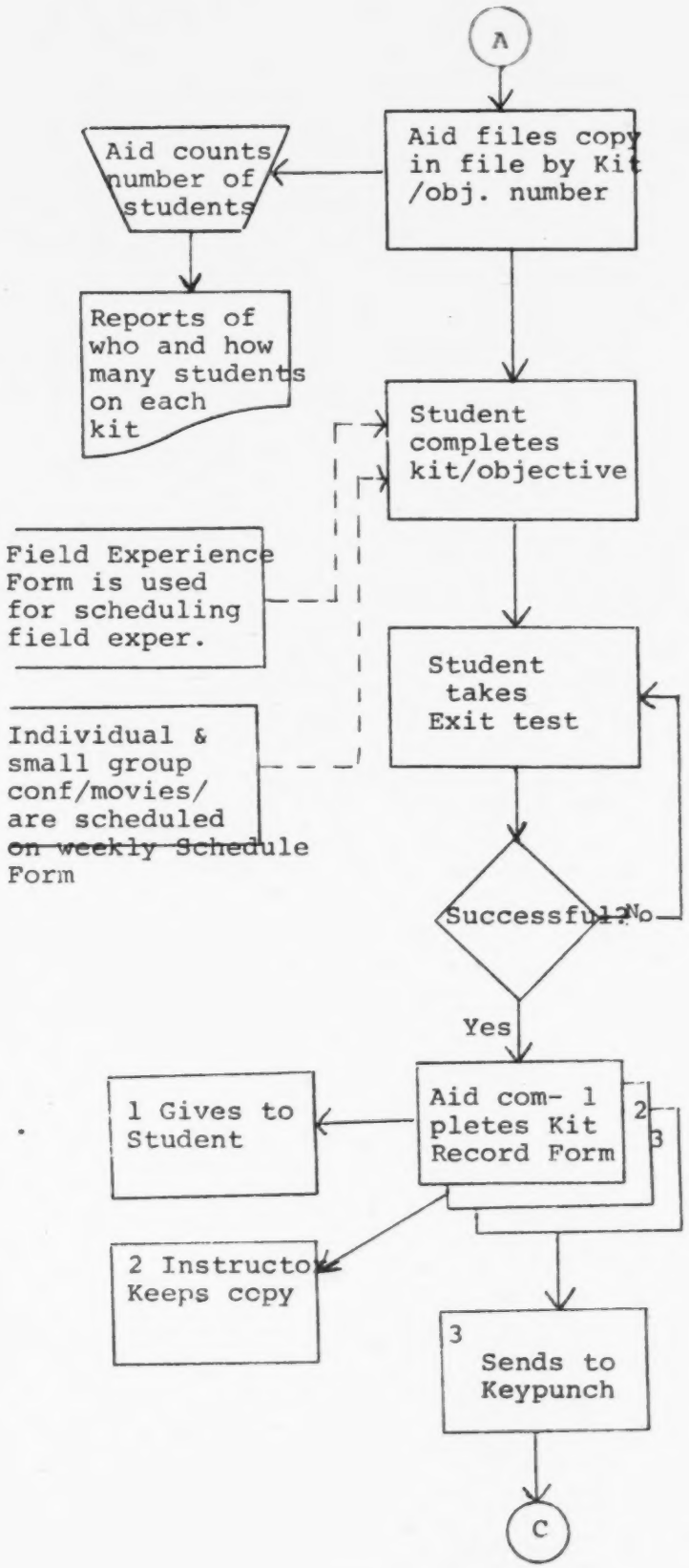
Same information as Master Student File. When a student becomes an inactive student (does not take a course for three years), he is moved from the Master Student File to this file.

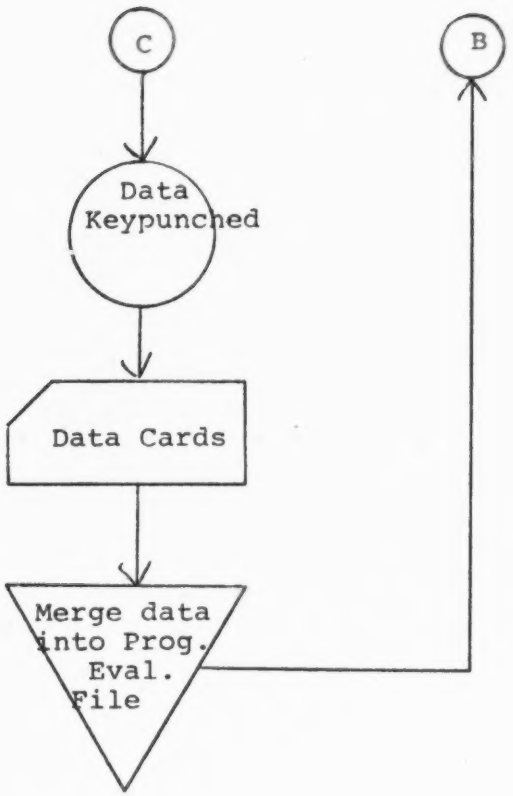
RELATIONSHIP BETWEEN COMPUTER FILES AND GENERATED REPORTS

FILES / REPORTS	Scheduling of Courses	Faculty Load	Census of Students	HPA of Students	Sex of Students	Marital Status	Faculty Service Report	Rolidex Labels	Mailing Labels	Average Age of Student	Work Experience Report	Vocational Certification Reports	No. of Students Needing Course	Names of Student-Out of Sequence	Analysis of Exit Tests	Analysis of Pre-test Scores	Kit Evaluation	Class Lists Expected	Class List Actual	Student Teaching Reports	Follow-Up Reports	Directory of Students
Master Student File			X	X	X	X		X	X	X		X	X	X								X
Follow-Up File									X			X									X	
Master Faculty File	X	X					X											X				
Plan of Work File	X										X	X	X	X				X				
Course Objective Parameter File	X																	X				
Student Teaching File																	X			X	X	
Program Evaluation File															X	X	X				X	
Current Glob Tape		X												X					X			

MANAGEMENT OF INSTRUCTIONAL SYSTEM


Student enters class
Student takes pre-test
Instructor grades test
Aid completes Exempt Form
Indicates Kits objectives of course student must complete
Data Keypunched
Data Cards
Merge data into Prog. Eva. File
Prog. Eval. File
Status of students and kits/ obj.
Student obtains kits/materials required to complete
Student completes 1st 6 items on Kit Record Form
Gives one copy of form to aid
A
B


A
Aid files copy in file by Kit /obj. number
Aid counts number of students
Reports of who and how many students on each kit
Student completes kit/objective
Field Experience Form is used for scheduling field exper.
Student takes Exit test
Individual & small group conf/movies/ are scheduled on weekly Schedule Form
Successful?
No
Yes
Aid com- 1 pletes Kit Record Form
2
3
1 Gives to Student
2 Instructo Keeps copy
3
Sends to Keypunch
C


C
B
Data
Keypunched
Data Cards
Merge data
into Prog.
Eval.
File

1—to school
2—to VAE files
3—to students

FIELD EXPERIENCE ASSIGNMENT

Name _____ Date _____

Local Address _____ Telephone No. _____

Class Standing:

_____ Junior _____ Senior _____ Graduate Student

Major _____ Minor(s) _____ _____

I. Briefly indicate experience in:
A. Extracurricular Activities:

1) High School

2) College

B. Hobbies or Special Interest:

C. Work and Travel Experiences:

D. Church and/or Community Experiences:

II. Assignment Preferences:
A. Do you have transportation available:

_____ Yes _____ No _____ Can Arrange

B. General Location desired or preferred school and/or teacher:

_____

_____

C. Hours Desired for Assignment:

Day _____ 1st choice _____ 2nd choice

Time _____ 1st choice _____ 2nd choice

III. Type of Assignment:

_____ Observation
_____ Mini-Lesson Presentation
_____ Tutoring
_____ Other aid to classroom teacher
_____ Other

This assignment is in connection with _____
(Name of Wayne Kit)

IV. School Assigned (to be filled out by VAE staff)

School _____ Principal _____

Subject _____ Teacher _____

Date _____ Time _____

(Please report to school office at least 15 minutes before the time you are scheduled to observe)

WEEKLY SCHEDULE FOR THE

MONDAY	TUESDAY	WEDNESDAY	
8:30	8:30	8:30	8:30
8:45	8:45	8:45	8:45
9:00	9:00	9:00	9:00
9:15	9:15	9:15	9:15
9:30	9:30	9:30	9:30
9:45	9:45	9:45	9:45
10:00	10:00	10:00	10:00
10:15	10:15	10:15	10:15
10:30	10:30	10:30	10:30
10:45	10:45	10:45	10:45
11:00	11:00	11:00	11:00
11:15	11:15	11:15	11:15
11:30	11:30	11:30	11:30
11:45	11:45	11:45	11:45
12:00	12:00	12:00	12:00
12:15	12:15	12:15	12:15
12:30	12:30	12:30	12:30
12:45	12:45	12:45	12:45
1:00	1:00	1:00	1:00
1:15	1:15	1:15	1:15
1:30	1:30	1:30	1:30
1:45	1:45	1:45	1:45
2:00	2:00	2:00	2:00
2:15	2:15	2:15	2:15
2:30	2:30	2:30	2:30
2:45	2:45	2:45	2:45
3:00	3:00	3:00	3:00
3:15	3:15	3:15	3:15
3:30	3:30	3:30	3:30
3:45	3:45	3:45	3:45
4:00	4:00	4:00	4:00
4:15	4:15	4:15	4:15
4:30	4:30	4:30	4:30
4:45	4:45	4:45	4:45
5:00	5:00	5:00	5:00
5:15	5:15	5:15	5:15
5:30	5:30	5:30	5:30
5:45	5:45	5:45	5:45
6:00	6:00	6:00	6:00
6:15	6:15	6:15	6:15
6:30	6:30	6:30	6:30
6:45	6:45	6:45	6:45
7:00	7:00	7:00	7:00
7:15	7:15	7:15	7:15
7:30	7:30	7:30	7:30
7:45	7:45	7:45	7:45
8:00	8:00	8:00	8:00
8:15	8:15	8:15	8:15
8:30	8:30	8:30	8:30
8:45	8:45	8:45	8:45
9:00	9:00	9:00	9:00
9:15	9:15	9:15	9:15
9:30	9:30	9:30	9:30
9:45	9:45	9:45	9:45
10:00	10:00	10:00	10:00

LE FOR THE _____ WEEK

THURSDAY	FRIDAY	SATURDAY
8:30	8:30	8:30
8:45	8:45	8:45
9:00	9:00	9:00
9:15	9:15	9:15
9:30	9:30	9:30
9:45	9:45	9:45
10:00	10:00	10:00
10:15	10:15	10:15
10:30	10:30	10:30
10:45	10:45	10:45
11:00	11:00	11:00
11:15	11:15	11:15
11:30	11:30	11:30
11:45	11:45	11:45
12:00	12:00	12:00
12:15	12:15	12:15
12:30	12:30	12:30
12:45	12:45	12:45
1:00	1:00	1:00
1:15	1:15	1:15
1:30	1:30	1:30
1:45	1:45	1:45
2:00	2:00	2:00
2:15	2:15	2:15
2:30	2:30	2:30
2:45	2:45	2:45
3:00	3:00	3:00
3:15	3:15	3:15
3:30	3:30	3:30
3:45	3:45	3:45
4:00	4:00	4:00
4:15	4:15	4:15
4:30	4:30	4:30
4:45	4:45	4:45
5:00	5:00	5:00
5:15	5:15	5:15
5:30	5:30	5:30
5:45	5:45	5:45
6:00	6:00	6:00
6:15	6:15	6:15
6:30	6:30	6:30
6:45	6:45	6:45
7:00	7:00	7:00
7:15	7:15	7:15
7:30	7:30	7:30
7:45	7:45	7:45
8:00	8:00	8:00
8:15	8:15	8:15
8:30	8:30	8:30
8:45	8:45	8:45
9:00	9:00	9:00
9:15	9:15	9:15
9:30	9:30	9:30
9:45	9:45	9:45
10:00	10:00	10:00

COURSE EXEMPTION RECORD FORM

I.D. No. cc 1-9 [ ][ ][ ][ ][ ][ ][ ][ ][ ]

Name of Student cc 10-29 [ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ]
(Last Name, First Name)

Course No. cc 30-33 [ ][ ][ ][ ]

Section cc 34-38 [ ][ ][ ][ ][ ]

Test Score cc 39-41 [ ][ ][ ]
(right justify)

Write required Kit numbers in boxes:

cc 42-44 [ ][ ][ ]

cc 45-47 [ ][ ][ ]

cc 48-50 [ ][ ][ ]

cc 51-53 [ ][ ][ ]

cc 54-56 [ ][ ][ ]

cc 57-59 [ ][ ][ ]

cc 60-62 [ ][ ][ ]

cc 63-65 [ ][ ][ ]

cc 66-68 [ ][ ][ ]

cc 69-71 [ ][ ][ ]

cc 72-74 [ ][ ][ ]

cc 75-77 [ ][ ][ ]

Year and Month Course Begins

cc 78-80 [ ][ ][ ]
Yr. MO.
(1, 4, 6, 9)

KIT RECORD FORM

I.D. No. cc 1-9 [ ][ ][ ][ ][ ][ ][ ][ ][ ] (right justify)

Name of Student cc 10-29 [ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ] Last Name First Name

Course cc 30-33 [ ][ ][ ][ ]

Section cc 34-38 [ ][ ][ ][ ][ ]

Kit No. cc 39-41 [ ][ ][ ]

Date Started cc 42-47 [ ][ ][ ][ ][ ][ ] Yr. Mo. Day

Exit Test Score (1) cc 48-50 [ ][ ][ ] (right justify)

Prerequisite Skills Score cc 51-53 [ ][ ][ ] (right justify)

Accumulated Time Spent on Kit cc 54-58 [ ][ ][ ][ ][ ] (right justify)

Date Ended cc 59-64 [ ][ ][ ][ ][ ][ ] Yr. Mo. Day

Exit-Test Scores (2) _____ Pre-Trial Score _____ Pre-Trial Score cc 65-67 [ ][ ][ ]

No. of Times Exit Test Taken cc 68 [ ]

Instructor's Signature _____

Indicate in minutes the amount of time you spent working on this Kit per day.

Date Begun _____ Year Month Day

Date	Minutes	Date	Minutes	Date	Minutes

Total Minutes _____

Course No. [ ][ ][ ][ ][ ][ ][ ] Kit No.

I.D. No. _____

Sample Printout for Instructor

COURSE NO. - NAME OF COURSE

Progress Report as of (date issued)

		Kit 101				Kit 102				. . .	Kit 109				Final Grade
ID	NAME	REQUIRED	DATE PASSED	SCORE	TIME	REQUIRED	DATE PASSED	SCORE	TIME	. . .	REQUIRED	DATE PASSED	SCORE	TIME	
Total No. of Students Completing Kit															
Ave. Score on Kit															
Ave. Time on Kit															

THE REFERRAL PROCEDURE

Station D Detail

TABLE OF CONTENTS

		Page
I.	Introduction to Process	R725-1
	A. Purpose of Process	R725-1
	B. Units Affected	R725-1
	C. Terms Used	R725-1
	D. Machines Used	R725-2
	E. Time Line	R725-3
II.	Overall Scheme of Procedure	R725-4
III.	Detailed Flowchart of Procedure	R725-11
IV.	Appendices	R725-23

A. Admissions Referral Papers
For Undergraduates
MSA-1595
Speech Evaluation
Form 1304
Form 3268
Form 3210
For Graduates
MSA-1595
Form 2093
Form 3523
Application for Graduate Admission

B. Sample Log Book Entries

C. Contents of Folders
All Curriculum Areas
Transmittal Form (R-1)
Student Referral Data Form (R-3)
Requirements for Students in VAE (R-4)
Business and Distributive
Plan of Work (Undergraduate and MAT)
Undergraduate and Certification Requirements
Work Sheet (R-8)
Work Experience (R-9)
Master of Arts in Teaching Program (R-5)
Master of Education (R-7)
Plan of Work (M. ED.)

D. Family Life
Plan of Work (Undergraduate and MAT)
Plan of Work (M. ED.)

E. Industrial Education
Plan of Work (Undergraduate and MAT)
Summary: Credit Hours Completed (R-10)
Course Schedules (R-11)
Plan of Work (Graduate)

F. Letters Sent to Students Applying for Admission
   Business and Distributive (R-12)
   Family Life (R-13)
   Industrial (R-14)
G. Referrals Ready for Administrative Committee Approval
H. Letters Sent to Newly Admitted Students
   All New VAE MAT Advisees (Certificate and Degree) (R-16)
   All New VAE Master of Education Students (R-17)
I. Sample Problems for Changing Magnetic Board
J. Format for VAE Microfilm Jacket
   Information Included in Microfilm Jacket
K. Form for Requesting Services from Counseling and Testing
L. Control Cards for Scanning Plans of Work
   Control Forms for Scanning Plans of Work
   Instructions for Scanning Plans of Work
M. Keypunch Request Card
   Tabulating Request Card
N. Listing of Trial Program Deck
   Listing of Merge Program Deck
O. Current List of Faculty Advisors

I. Introduction to System

A. Purpose: The referral procedure is that series of steps required to process a student's admission into the department.

B. Units Affected

1. Clerical Station D--Coordinates the entire process

2. Admissions Office--Supplies initial request forms

3. Faculty Adviser--Helps students fill out plan of work

4. Curriculum Coordinator--Handles cases in which the student cannot meet with an adviser; submits referrals to the Administrative Committee for approval

5. Administrative Committee--Makes decisions concerning the admittance of students.

6. Counseling and Testing--Scans plans of work

C. Terms Used

1. Curriculum Areas: BED - Business Education; DED - Distributive Education; FLE - Family Life Education; IED - Industrial Education.

2. Curriculum Coordinator: A person who is responsible for directing (coordinating) activities within a curriculum area. Refer to Appendix O for list of faculty.

3. Faculty Adviser: All members of the faculty are advisers.

4. Referral: Sometimes refers to a student requesting admission to the department. The term also refers to the papers received from the Admissions Office. Referral dates are related to the term in which a newly admitted student may begin classes. Thus a student requesting admission during the Winter term would probably begin classes in the Spring. He is called a "Spring Referral."

D. Machines Used

1. Microfilming equipment - Located in room 42. See "Machine Operations Manual" for directions.

2. Keypunch - Located in room 41. See "Machine Operations Manual" for instructions.

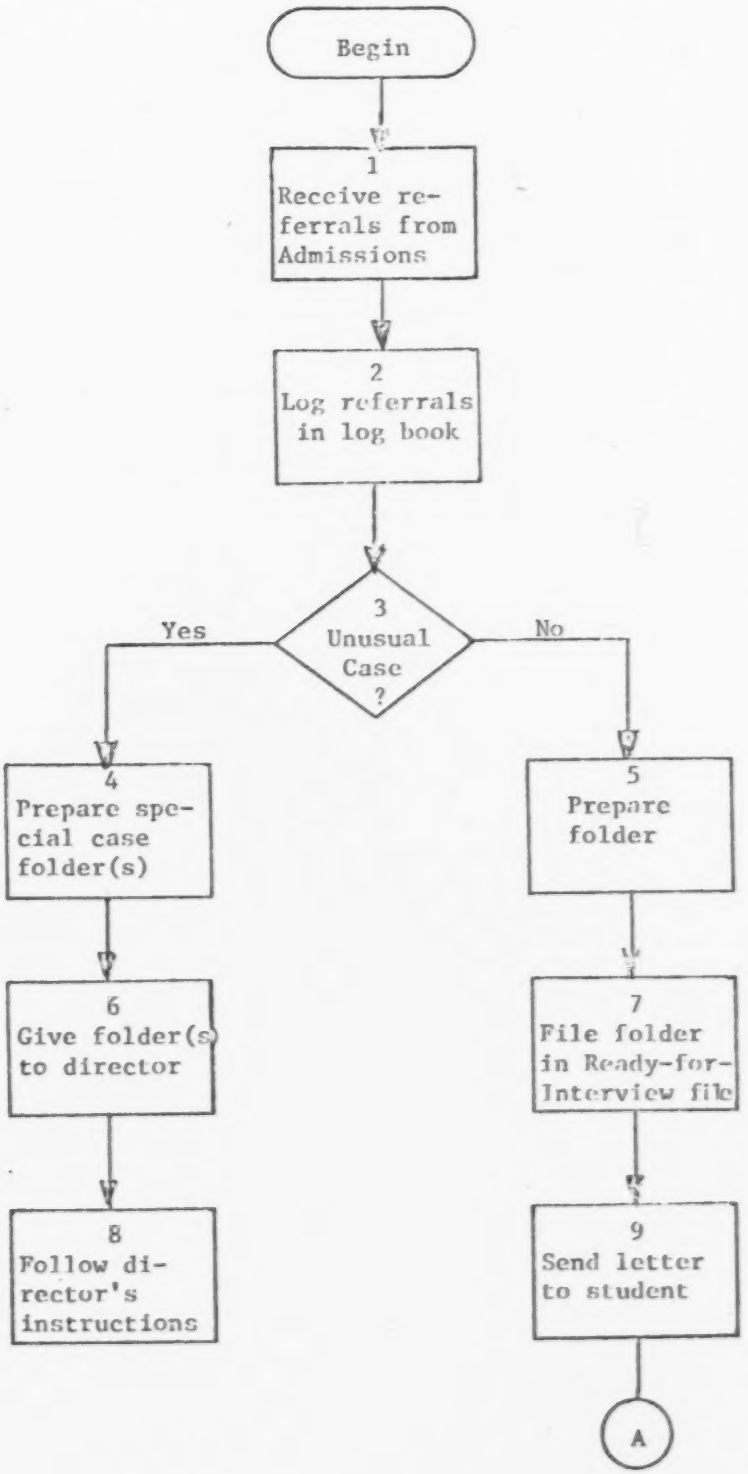
3. Computer Terminal - The mag card (station B) is a computer terminal. Also there are regular terminals several places in the building. The "Machine Operations Manual" has directions for using both.

E. TIME I

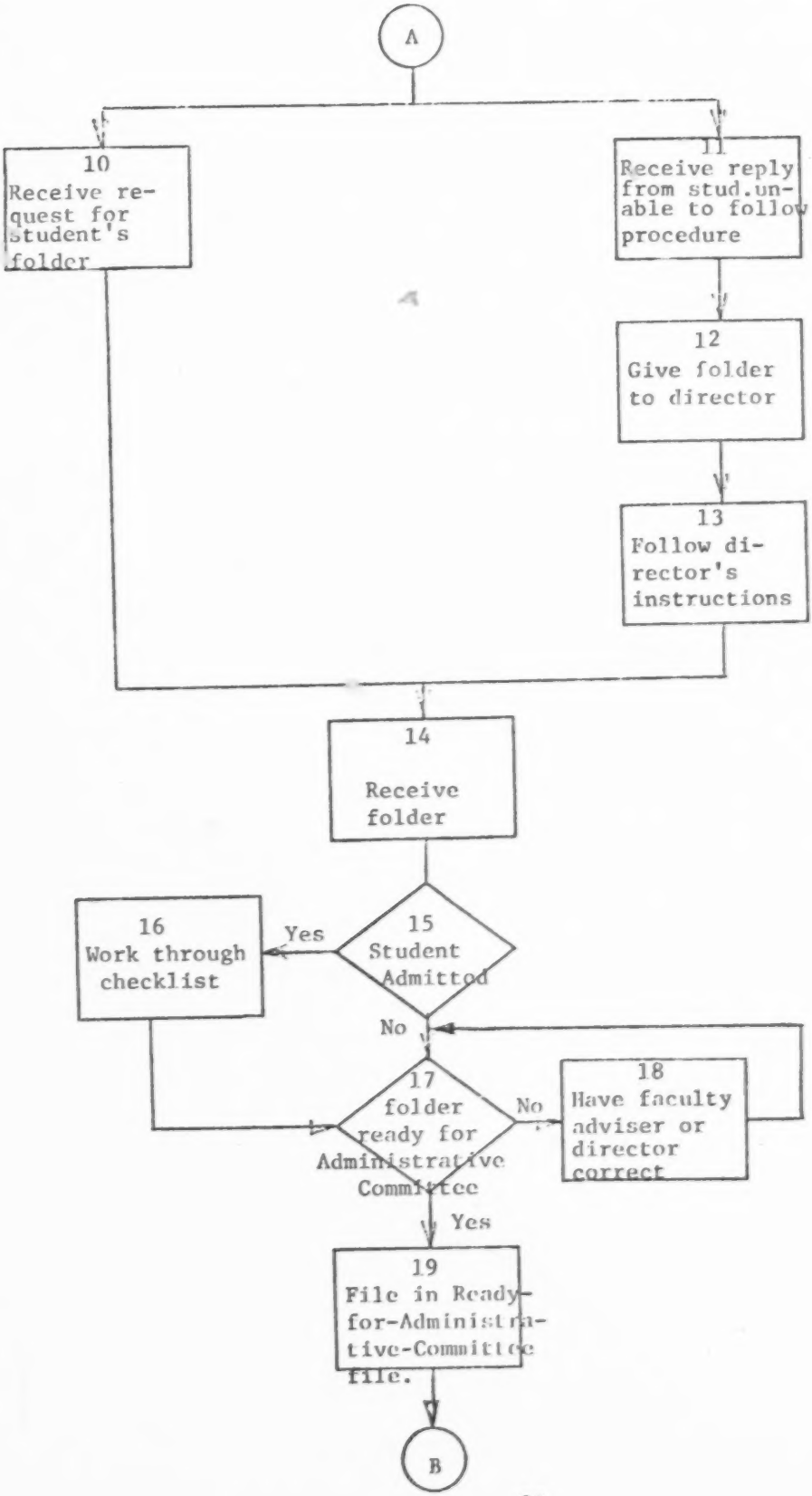
	Weekly					Time Line for Referral Procedure										
	Monday	Tuesday	Wednes	Thurs.	Friday	1	2	3	4	5	6	7	8	9	10	11
Receives Referrals	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
Logs in Referrals & Makes Folders	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
Sends Letter to Referee	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
Calls Referee														X		
Microfilms Approved Referrals			X				X	X	X	X	X	X	X	X	X	
Types Referral Status Report					X	X	X	X	X	X	X	X	X	X		
Checks Plans of Work	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
Scans, Reports, Interprets & Runs Program																X
Updates Magnetic Board			X				X	X	X	X	X	X	X	X	X	
Photocopies Approved Plans and Sends to Student			X	X	X		X	X	X	X	X	X	X	X	X	X

FIGURE I

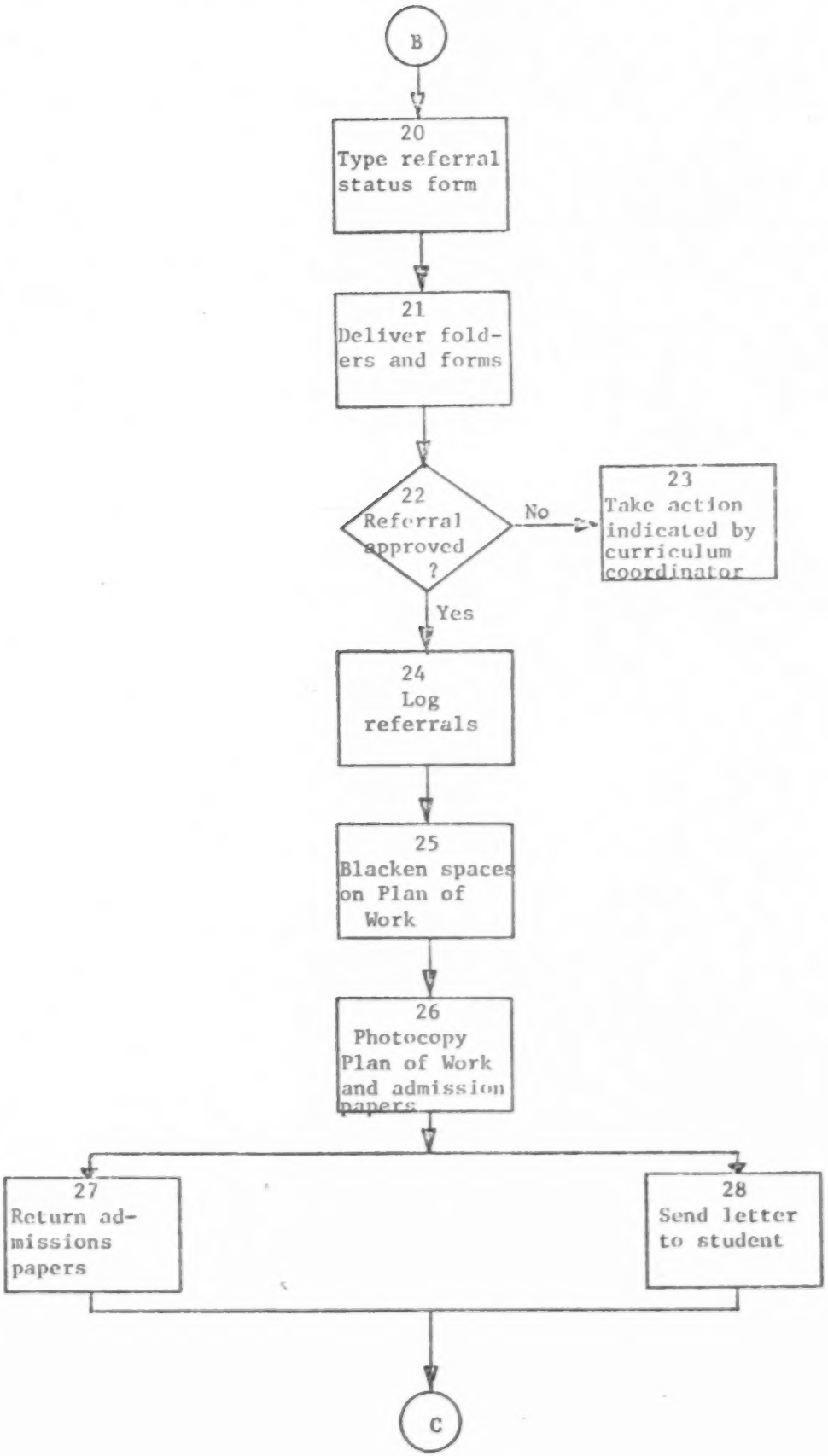
Referral Procedure

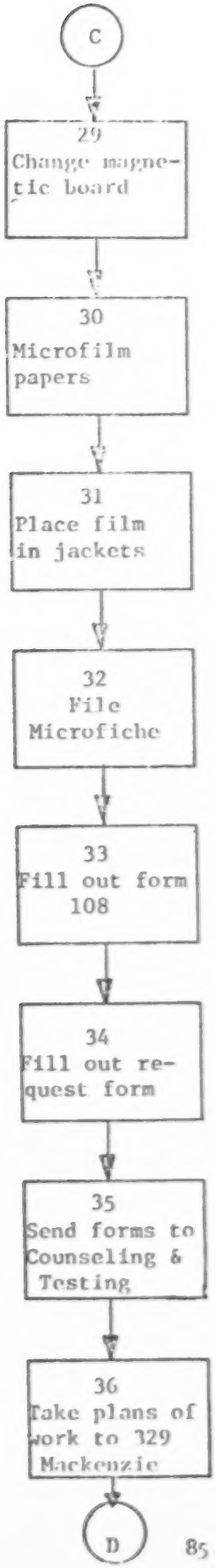


R725-4

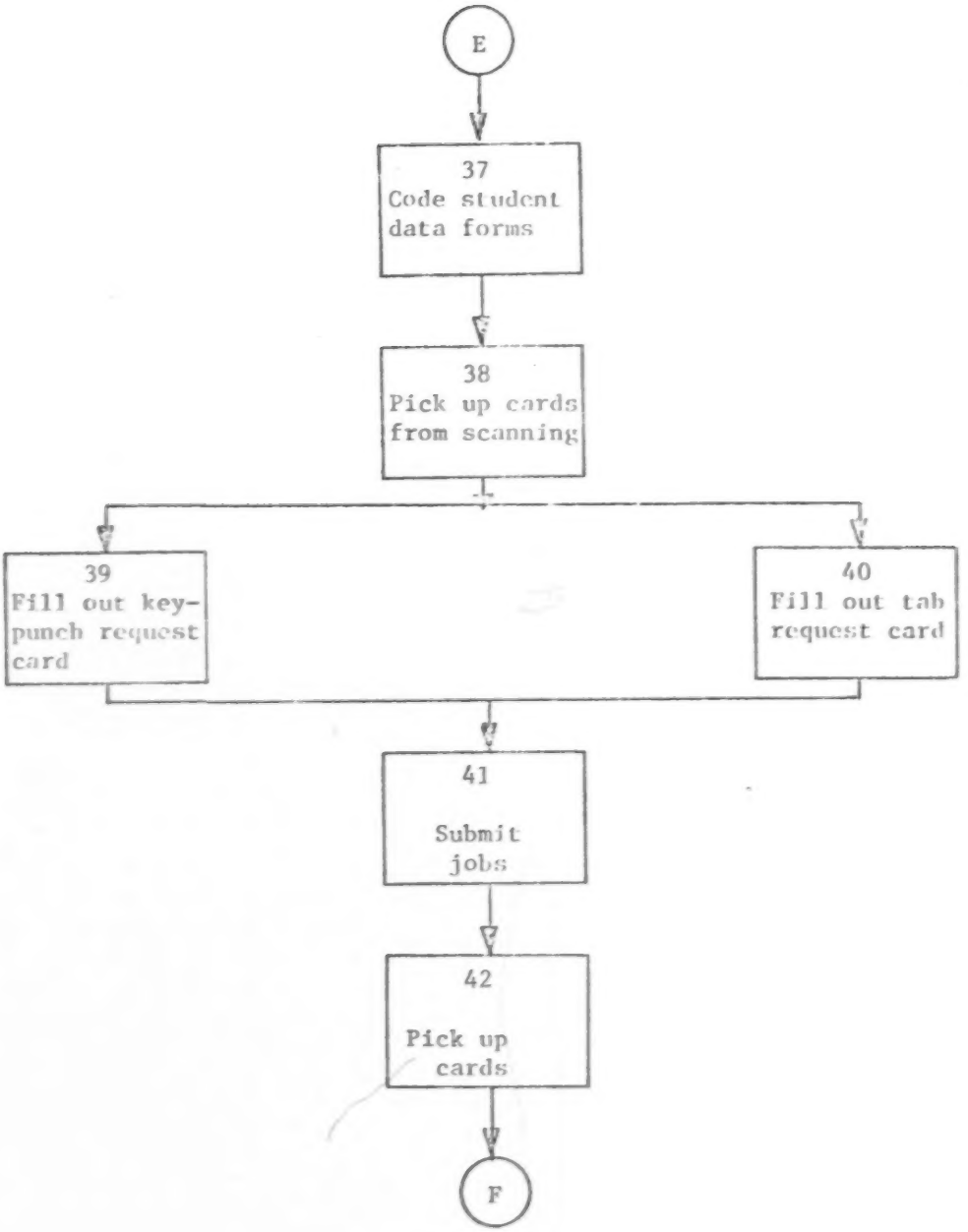

A
10
Receive request for student's folder
11
Receive reply from stud. unable to follow procedure
12
Give folder to director
13
Follow director's instructions
14
Receive folder
15
Student Admitted
Yes
16
Work through checklist
No
17
folder ready for Administrative Committee
No
18
Have faculty adviser or director correct
Yes
19
File in Ready-for-Administrative-Committee file.
B

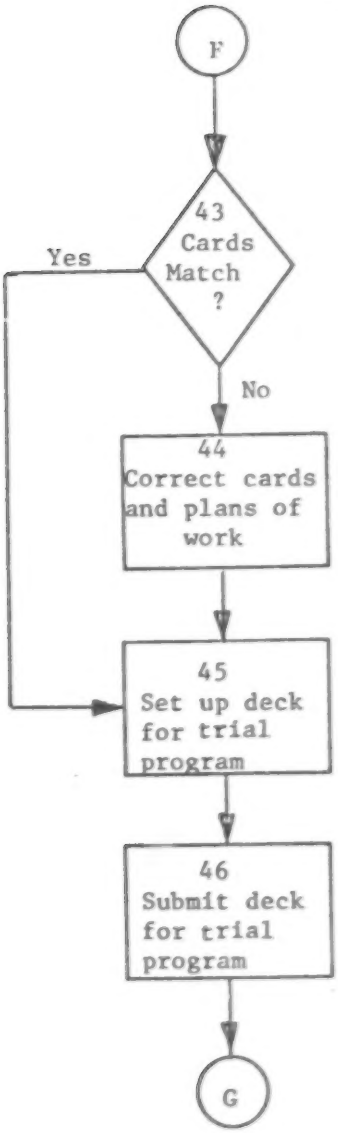
R7[illegible]-5

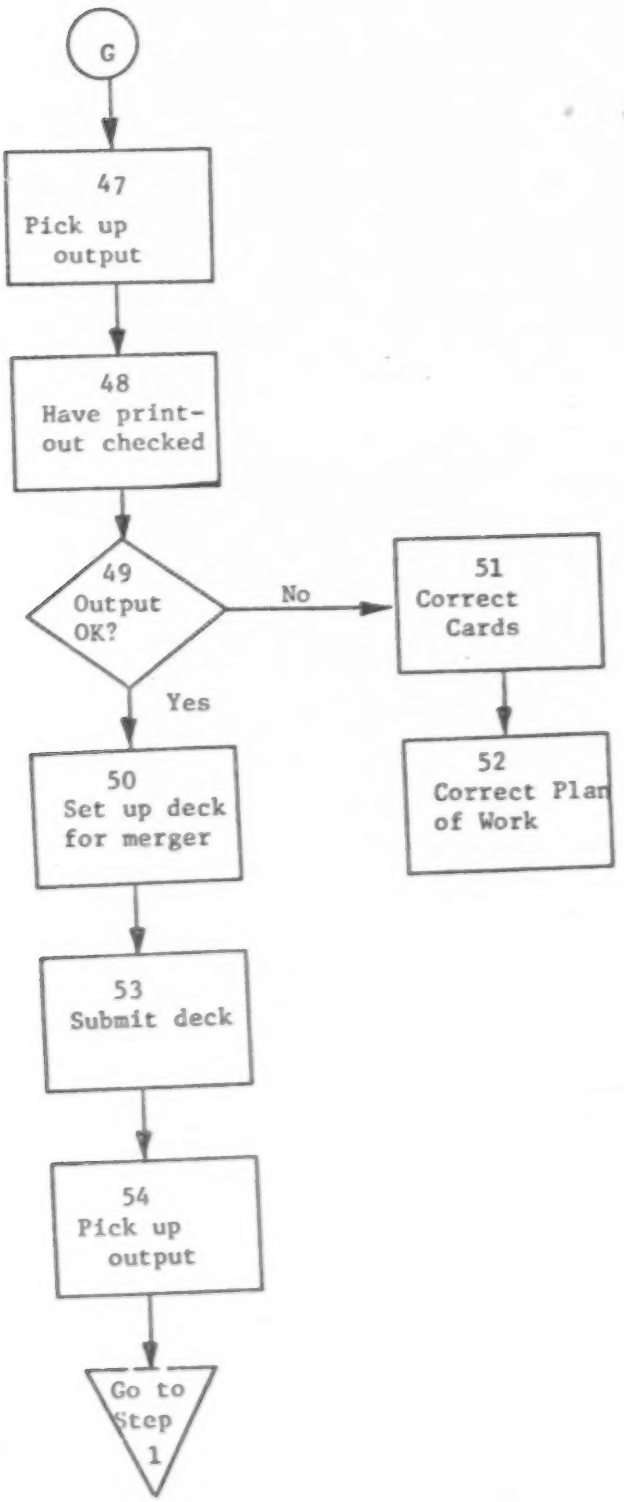

B
20
Type referral status form
21
Deliver folders and forms
22
Referral approved ?
No
23
Take action indicated by curriculum coordinator
Yes
24
Log referrals
25
Blacken spaces on Plan of Work
26
Photocopy Plan of Work and admission papers
27
Return admissions papers
28
Send letter to student
C


C
29
Change magnetic board
30
Microfilm papers
31
Place film in jackets
32
File Microfiche
33
Fill out form 108
34
Fill out request form
35
Send forms to Counseling & Testing
36
Take plans of work to 329 Mackenzie
D

R725-7


E
37
Code student data forms
38
Pick up cards from scanning
39
Fill out key-punch request card
40
Fill out tab request card
41
Submit jobs
42
Pick up cards
F


F
43
Cards
Match
?
Yes
No
44
Correct cards
and plans of
work
45
Set up deck
for trial
program
46
Submit deck
for trial
program
G


G
47
Pick up output
48
Have print-out checked
49
Output OK?
No
51
Correct Cards
52
Correct Plan of Work
Yes
50
Set up deck for merger
53
Submit deck
54
Pick up output
Go to Step 1

PROCEDURE DESCRIPTION - FLOW CHART

Task Title: Referral Procedure — Task ID Number

Step Description — Flow Chart

Step 1

1. Check to make sure that all names on the list actually have referral papers. If not, request them from Admissions.

2. Make sure referrals contain all needed forms

   a) If referral is a graduate the folder should include:
      (1) White MSA - 1595
      (2a) Green referral action sheet OR
      (2b) Change of Major (F3523)
      (3) Application form
      (4) Transcript(s)

   b) If referral is an undergraduate the folder should include:

      (1) White MSA - 1595
      (2) Speech evaluation form
      (3a) Blue referral and recommendations (2 copies) OR
      (3b) White form 3268-5C
      (4) Personal history form
      (5) Transcripts--one from each college or university attended.

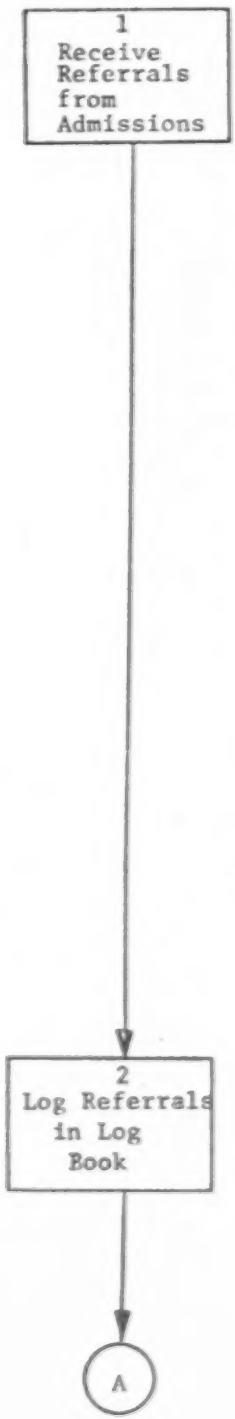
Samples of these forms are in Appendix A.

3. If any form is missing, request it from Admissions (Room 489) or if only one copy is missing, make a copy.

Step 2

1. Write in Log Book:

   a) Date
   b) Student's name
   c) ID number
   d) curriculum area (BED,DED,FLE,IED)



R725-11

PROCEDURE DESCRIPTION - FLOW CHART

Task Title: Referral Procedure

Step Description

Step 2 (cont'd.)

e) status (undergraduate, master, of Education, MAT, sixth year specialist, doctoral)

f) date referral papers are due back in Admissions (See Appendix B)

Step 3

Check referral papers for unusual circumstances--primarily

a) students requesting degree but no certification
b) post degree students

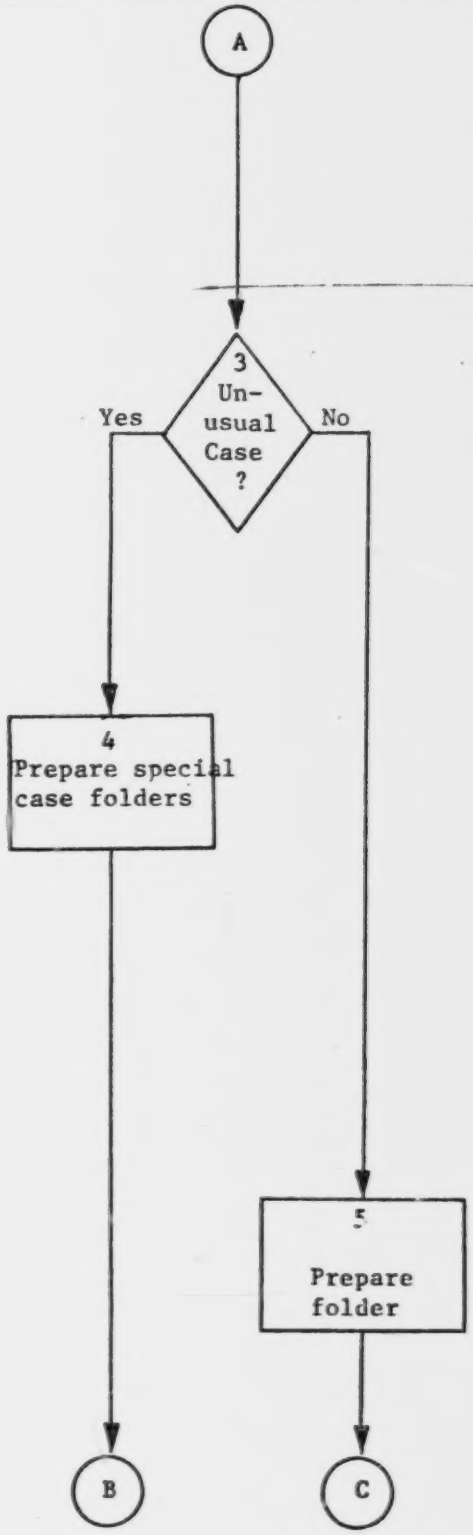
Step 4

1. Type a name label
2. Attach to folder
3. Number the folders consecutively (Note: these numbers should duplicate the regular folders.)
4. Place all papers in the file, including any previous correspondence with the person. (This is located in the miscellaneous file.)
5. Attach a short note to the folder explaining why the folder is being given to the director.

Step 5

1. Type a name label for each name.
2. Attach BED and DED names to green folders; FLE names to red folders; IED names to blue folders.
3. Number the folders consecutively (Note: these numbers should not duplicate special cases.)

Flow Chart



R725-12

PROCEDURE DESCRIPTION - FLOW CHART

Task Title: Referral Procedure

Step Description

Step 5 (cont'd.)

4. Place all papers for a person in his folder, including any previous correspondence (found in the miscellaneous file).
5. Include in all folders
   a) Admissions papers (step 1)
   b) Transmittal form (R-1)
   c) Student Referral Data Form (R-3)
   d) Curriculum area and status Plan of Work (e.g. FLE, Graduate)
   e) Curriculum area and status requirements (R-4)
   f) In addition:
      BED &DED - two copies of worksheet (R-8); two copies of work experience form (R-9)
      IED - worksheets (R-10, R-11)
   g) Previous correspondence. (See Appendices C-E)

Step 7

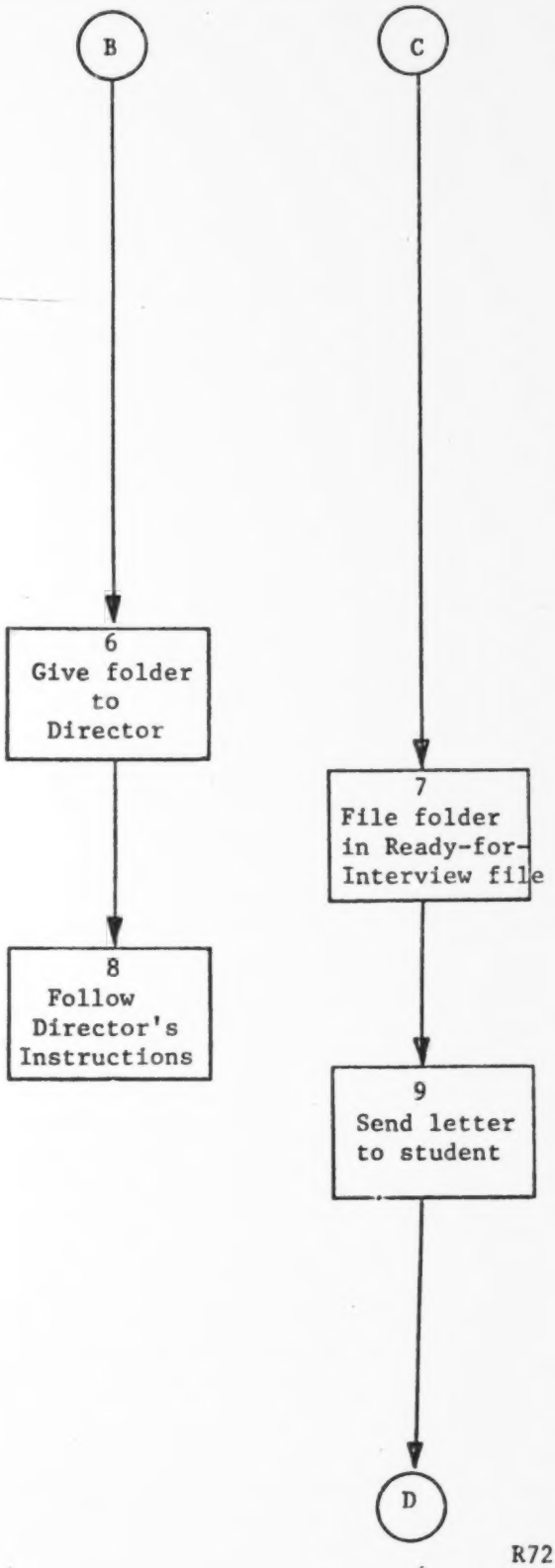
This file is located at station D desk.
1. Separate folders by curriculum area.
2. File folders alphabetically by name--within each curriculum area.
3. Log location of folder in log book.

Step 9

1. Type inside address on form letters (R-12, R-13, R-14).
2. Fill in date line using date referral papers are due back in Admissions.
3. Make a carbon copy of the above.
4. Send BED letter and copy of the work experience form to BED students.
5. Send FLE and IED letters to students in respective curriculums.
6. Log "date sent" in log book.
7. Place carbon in student's file.

(See Appendix F)

Flow Chart



R725-13

PROCEDURE DESCRIPTION - FLOW CHART

Task Title: Referral Procedure

Step Description

Step 10

1. Pull folder from file
2. Log folder out on 'out' card
3. If folder has not been returned within 24 hours, check with adviser.

Step 12

Hand folder and student's reply to the director.

Step 13

Director may ask you to follow all, part, or none of the usual procedural steps.

Step 14

Folders should be returned by faculty adviser within 24 hours. (If not, check with adviser).

Step 15

Check transmittal form. 'Student admitted' box should be checked to take 'yes' branch.

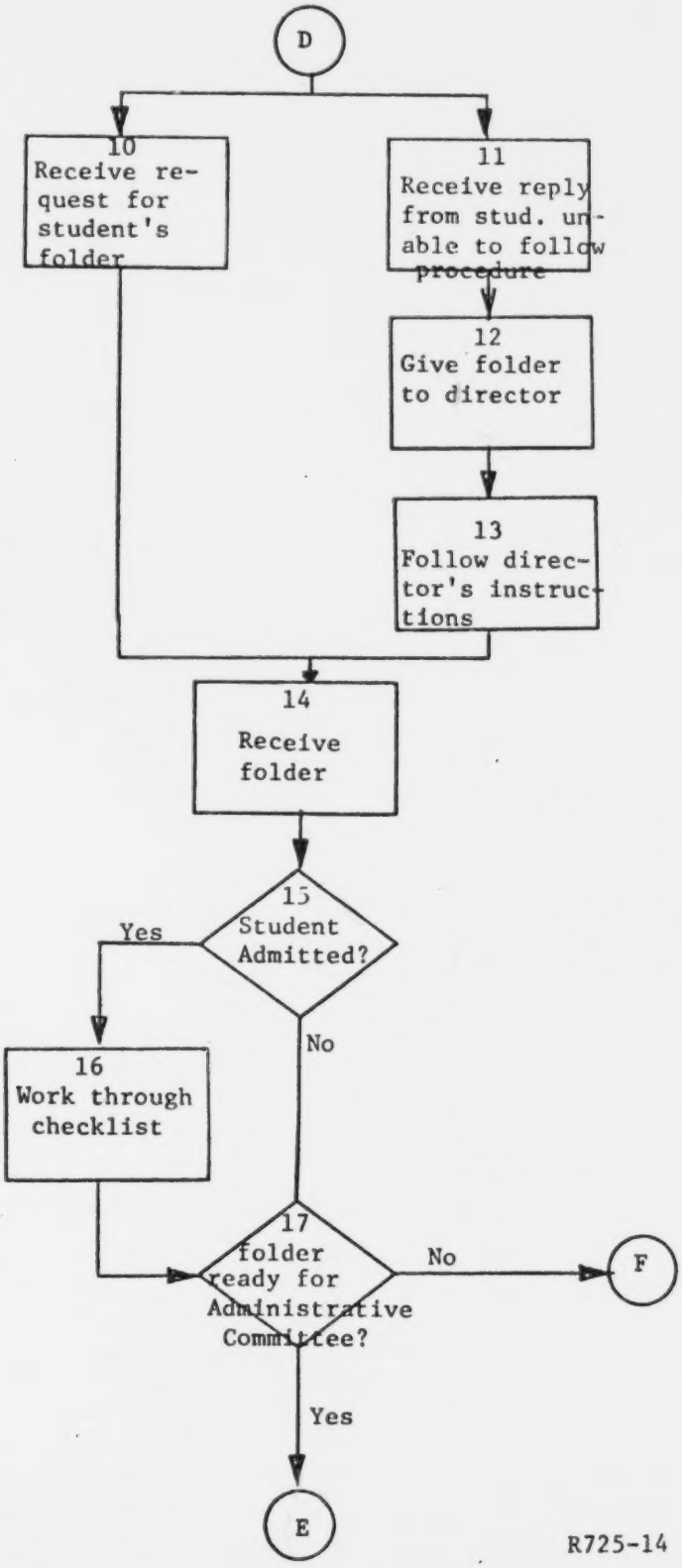
Step 16

Complete or check all items on bottom of transmittal form. Any inaccuracy in this step will result in much excess work later.

Step 17

Folder is ready for administrative committee if all items on the transmittal form can be checked "yes".

Flow Chart



R725-14

PROCEDURE DESCRIPTION - FLOW CHART

Task Title: Referral Procedure

Step Description

Step 18

Take the folder back to the adviser or to the director if you cannot make corrections yourself. Be certain that the social security number appears on both sides of the plan of work. All spaces will be transferred to punches on cards and if no social security number is filled in you may spend several hours trying to identify one card.

Step 19

This file is located at station D. File by curriculum area.

Step 20

Each Friday type 5 copies of the referral status form (R-2). Code No. is the number on the person's folder. (See Appendix G)

Step 21

Folders and a copy of the referral status form are given to the respective curriculum coordinators in each area. In addition, one copy of the form stays at station D and one copy goes to the director.

Step 22

Referral is approved if Referral-Status form is so marked.

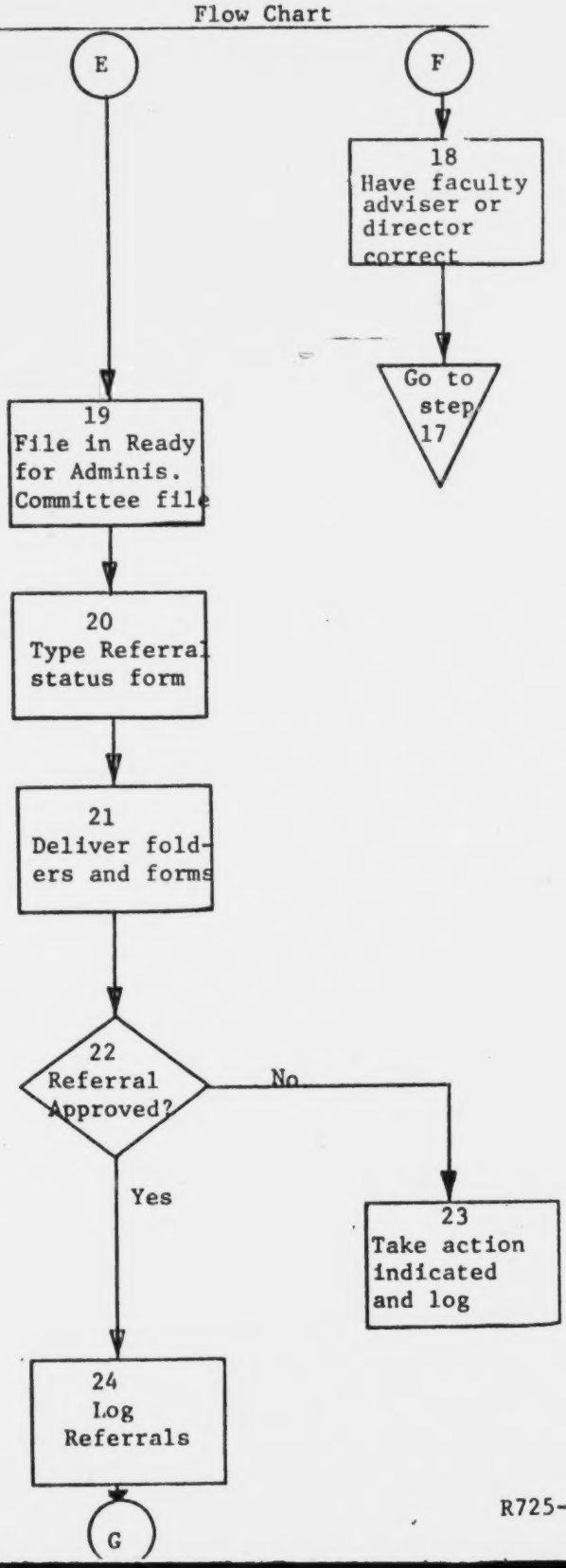
Step 23

Whatever action is taken should be logged including date in 'not approved' column.

Step 24

Write date in proper column.

Flow Chart



PROCEDURE DESCRIPTION - FLOW CHART

Task Title: Referral Procedure

Step Description

Step 25

All spaces on Plans-of-Work have been approved, those spaces must be blackened in with a heavy black pencil. Make sure all spaces are marked.

Step 26

Use the 3M copier.
Admissions papers to copy.
1. Transcripts (you may keep WSU undergraduate transcripts)
2. Form 1304, 2500 (blue) if there is only one copy.
3. Form 3268-5C-1/69

Step 27

Return all admission papers except:
1. Undergraduate WSU transcripts.
2. Form 3210-25C
3. Adviser's copy of Form 2093-10M
4. One copy of Form F3523.

Step 28

Send photocopy of Plan-of-Work and letter for program to which student has been admitted (undergrad & MAT, or M.Ed. forms (R-15, R-17, see Appendix H).

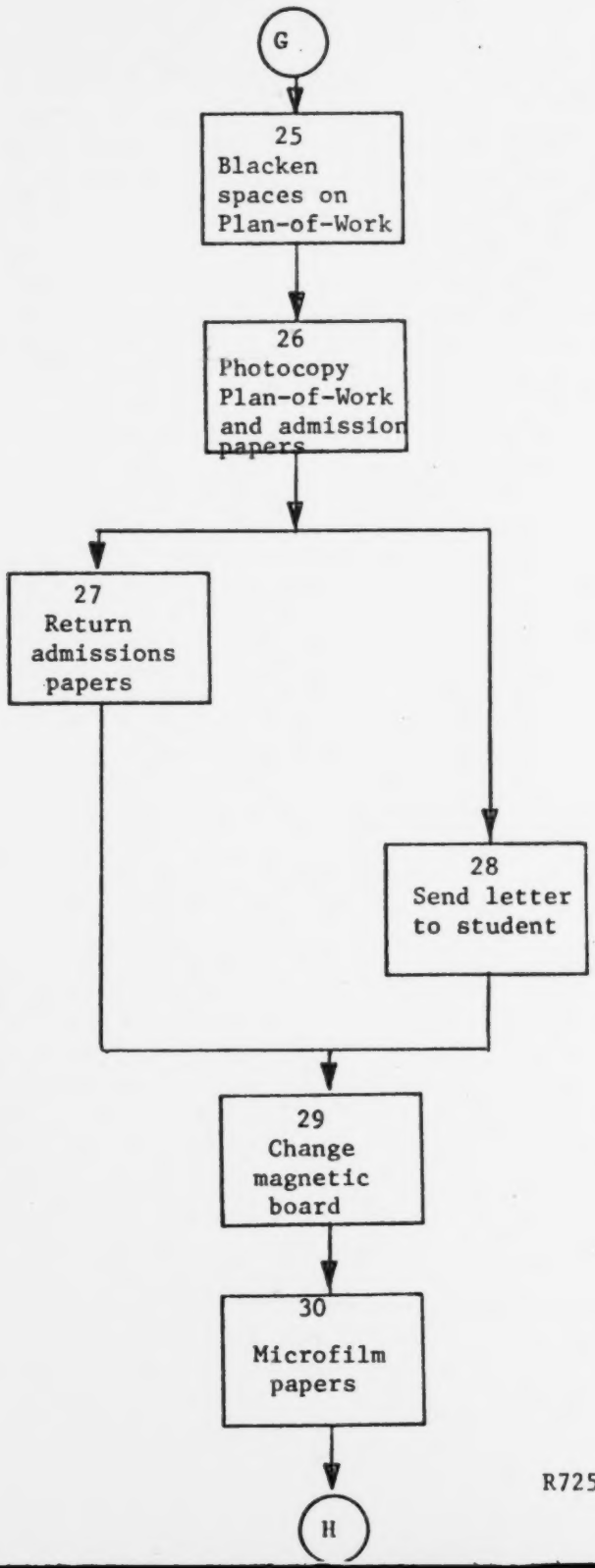
Step 29

Appendix I contains a sample problem and instructions.

Step 30

The following papers must be micro-filmed.
1. Transcripts, Plan of Work, Changes in Plan of Work
2. Correspondence
3. Recommendations
4. Admission Papers (see Step 1)
5. Miscellaneous items

Flow Chart



R725-16

PROCEDURE DESCRIPTION - FLOW CHART

Task Title: Referral Procedure

Step Description	Flow Chart

Instructions for using the equipment are in the machine operator's manual.

Step 31

Appendix J has a model of the microfiche layout. Row one contains the following papers: a) Transcripts, b) Plan of Work. Row Two: a) correspondence. Row Three: a) recommendations. Row Four: a) See Step 1 for list of forms. Row Five: miscellaneous. There should only be one jacket per person. If there are too many papers for one row, put remaining ones in Row Five--Miscellaneous.

Step 32

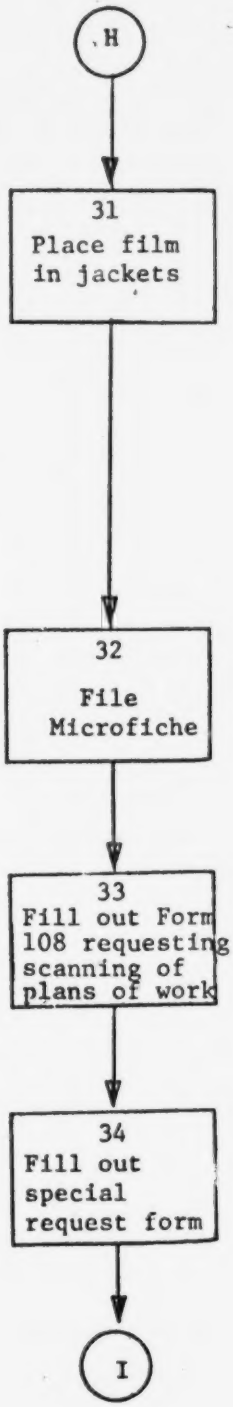
File microfiche alphabetically by name within each curriculum area. In addition, Family Life separates graduates from undergraduates.

Step 33

There is a sample form 108 requesting this service in Appendix K. Forms are available from station C. At end of 9th week fill out this form.

Step 34

This form is obtained from Counseling and Testing (if you do not have any, call 7-3400). A sample form is filled out in Appendix K. Simply check the boxes "scanning" and "keypunching."



R725-17

PROCEDURE DESCRIPTION - FLOW CHART

Task Title: Referral Procedure

Step Description

Step 35

Send the above two forms to:
Counseling and Testing
Room 329
Mackenzie Hall
You must do this at least ten days before the plans are to be scanned.

Step 36

Arrange the plans of work in ascending order (by social security number). Take the plans of work which are to be scanned to 329 Mackenzie. In addition, take:
1) 3 Plan-of-Work control forms (so labeled)
2) 2 Control Cards (labeled)
3) Hectographed sheet of instructions. (See Appendix L)

Step 37

On the student data sheet cross all letter "O's" and "I's". Letter "Z's" must either be straight so that there is no confusing with 2, or they must also be crossed.
Example:

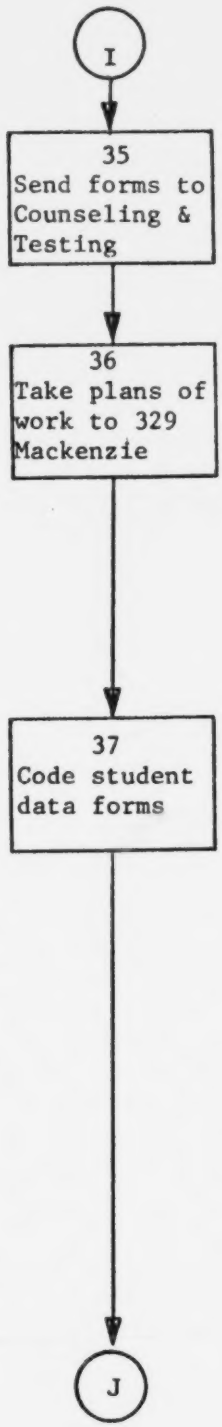
SUZIE Ø. WHITE

If a keypuncher encounters the following.

SU2IE O. WHITE

SU21E O. WH1TE
where the middle initial is a zero, the "i's" become ones and the Z looked too much like 2 so 2 was punched.

Flow Chart



Task Title: Referral Procedure

Step Description	Flow Chart

Step 38

Go to room 329 Mackenzie to get the cards. Allow 24-48 hours for them to be completed. (You can call 7-3400 to check.) There will be 12 decks (side one and side two of each curriculum area and status). Also be sure you receive the 3 control sheets, the 2 control cards and the hecto sheet of instructions.

Step 39 and 40

Keep a supply of these cards on hand. When you get down to two cards, duplicate several more. Two completed cards are in Appendix M.

Step 41

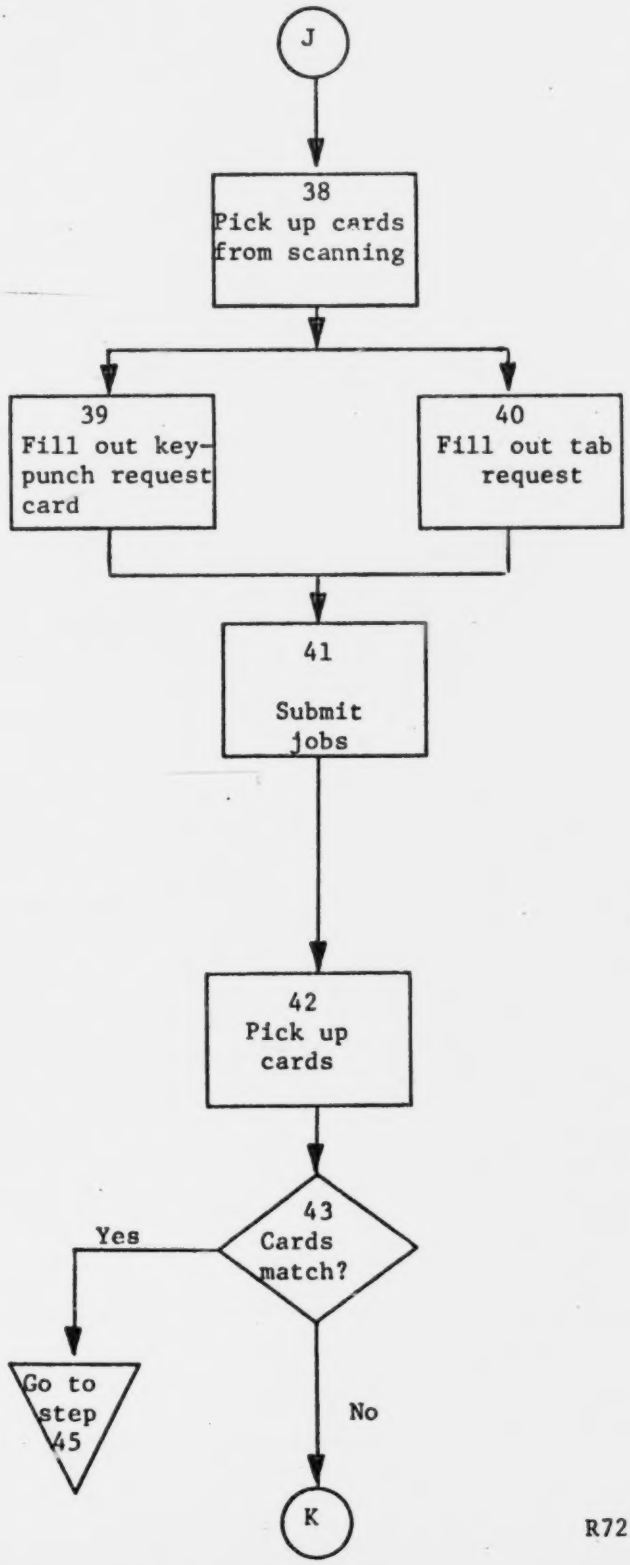
Submit the two jobs to the computing center. The pink tab card is placed on the deck of cards received from scanning. The yellow keypunch request card is clipped to the coding forms. Separate the coding forms by curriculum area and then by status (graduate and undergraduate).

Step 42

Give the stub portions of the two request cards to the person at the control desk.

Step 43

This step concerns the reproduced deck from scanning. If there is a social security number on every card and if each number appears twice, follow the 'yes' route.



R725-19

PROCEDURE DESCRIPTION - FLOW CHART

Task Title: Referral Procedure

Step Description

Flow Chart

Step 44

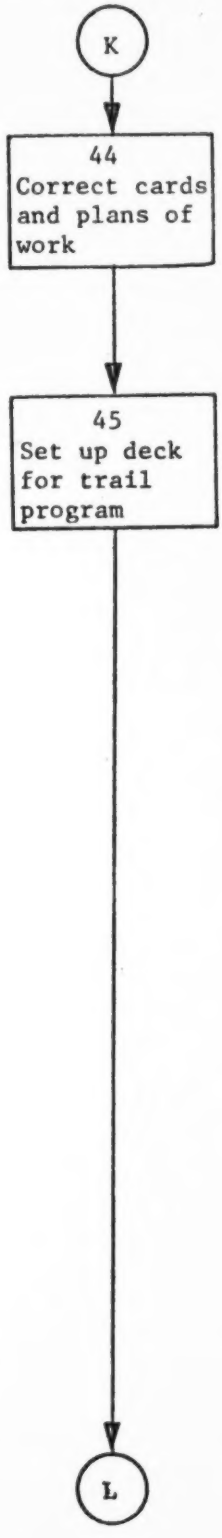
Arrange the cards (side one and side two) in the same order as the plans of work which were scanned. By matching cards and plans of work, you should be able to determine which corrections need to be made. Appendix M explains how to punch cards for sheets not scanned.

Step 45

Separate the Name-ID cards (those punched from the coding forms) by curriculum area. (Note: BED & DED go together.) Then separate graduates from undergraduates in each area. (Note: Graduates include MAT, MEd, Specialists, and doctoral students.) The following codes are used:

Curriculum in columns 76-78
  BED & DED = 141, 195, 143 or 196
  FLE = 147 or 400
  IED = 148 or 403
Status is in columns 79-80
  Undergrad = 01-04
  Graduate = 51, 54, 57, 67

Insert BED & DED undergraduate Name-ID cards between cards 15 and 16 in the TRIAL PROGRAM deck. There should be a handwritten indication on the 16th card to confirm this. Similarly insert each of the remaining 5 decks in the places indicated (between $NUMBER and $UNNUMBER cards in each case). The last indication to insert cards refers to those produced by the computing center). The order of persons does not matter as long as each person's side one card is followed immediately by his side two card. (Note: side one cards have punches through column 80. Side two cards have punches only through column 55.)



R725-20

Task Title: Referral Procedure

Step Description

Flow Chart

Step 46

When you hand the deck to the person at the central desk, you will be given a yellow card with a receipt number. This number matches that on the pink card which is placed on your deck. Keep the yellow card and use it to claim your output the next day. Any alternative to this procedure is that the cards may be read in immediately and handed back to you. You will still receive the yellow receipt card.

Step 47

Take the yellow receipt card to the control desk the next day. You will have to ask for your cards if they were not read in the previous day. (Cards can be read in immediately only when the system is operating.)

Step 48

Take printout to the systems specialist to be checked for errors.

Step 49

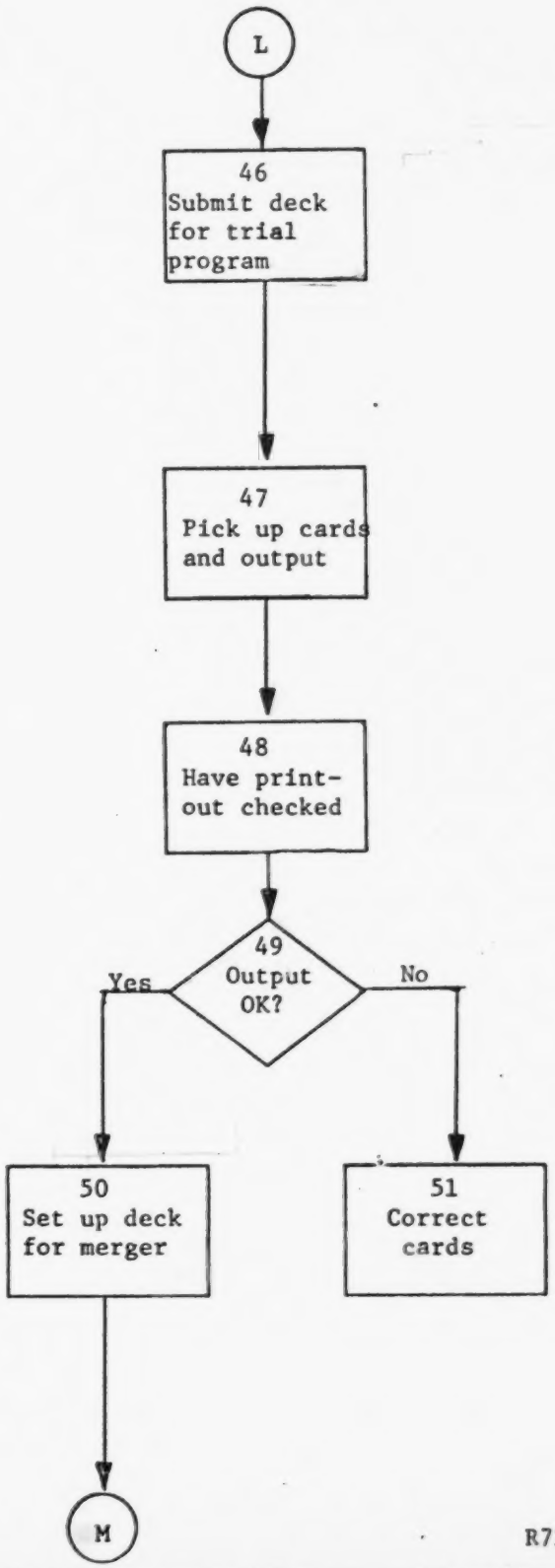
Follow appropriate path.

Step 50

The merge deck should not replace the trail deck. Set up is the same as the trial deck. See step 45.

Step 51

Correct cards by duplicating up to the incorrect character(s), punching the correct character(s) and duplicating the remainder of the card. Discard the incorrect card and place the newly punched card into the deck.



R725-21

PROCEDURE DESCRIPTION - FLOW CHART

Task Title: Referral Procedure

Step Description	Flow Chart

Step 51 (cont'd.)

Correcting the cards may entail consultation with the student, his adviser, or a curriculum coordinator if information is missing.

If the person who checks the print-out suggests it, you may return to step 29 thus running the trial program once more.

Step 52

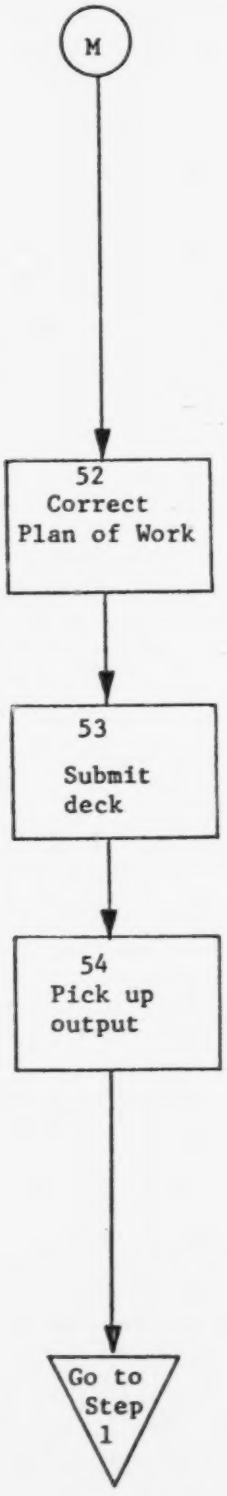
Since the card can only be wrong if the plan of work is wrong, the plan of work will also have to be corrected. Consult a curriculum coordinator if you have not already done so to correct the card.

Step 53

See step 46 if you have questions about submitting a job to the computer center.

Step 54

See step 47 if you have questions about picking up a job from the computer center.



CENSUS OF ACTIVE VAE STUDENTS

NAME OF PROGRAM: CENSUS

PURPOSE OF PROGRAM: To provide CENSUS of VAE students actively enrolled in courses during current quarter. It also will count any students who have registered as 00 majors but who are taking VAE courses.

LIMITATIONS OF PROGRAM: Program will not include in its count any business and distributive education doctoral students who are not enrolled in VAE courses.

EXPLANATION OF PROGRAM: The data for this program is located on the current quarter GLOB magnetic tape. If the GLOB tape has not been generated for the current quarter, you must do this first. Allow five days for the tape to be made. You will need the data from this program for updating the magnetic board at the beginning of each quarter.

TO GET PRINTOUT:

1. Call Gary Smith, 7-1784, one week before you need the data, and request that he get a GLOB for the current quarter.
2. Call him back in about 5 days to get the tape number.
3. Decide whether you wish to run this program in conversational or batch mode. It is a short output but it takes approximately 20 minutes to execute the program. Conversational mode is preferable.

If conversational mode, type on terminal:

1. $SIGNON XBF2 insert 4-digit tape #
2. (password)
3. $RUN *MOUNT PAR =00XXXX 9TP *T* VOL=00XXXX MODE=800 SIZE=3094 RING=OUT "PRODSTU.EDGLOB'
4. $RUN *FORTRAN SCARDS=CENSUS
5. $RUN-LOAD# 1= T 7=*SINK*
6. $SIGNOFF

If batch mode, type on terminal:

1. $SIGNON XBF2
2. (password)
3. $CREATE -TEMP
4. $NUMBER
5. $$SIGNON XBF2 insert 4-digit tape #
6. (password)
7. $$RUN =MOUNT PAR=00XXXX 9TP *T* VOL=00XXXX MODE=800 SIZE=3094 RING=OUT 'PRODSTU.EDGLOB'
8. $$RUN *FORTRAN SCARDS=CENSUS
9. $$RUN -LOAD# 1= *T*
10. $$SIGNOFF
11. $UNNUMBER
12. $RUN BATCH SCARDS=-TEMP
13. $SIGNOFF

You will need to pick up output at the Computing Center 24 hours later.

PROBLEM SOLVING:

1. If you cannot get the tape mounted--you will receive a response such as 'INCORRECT EXTERNAL LABEL', 'INCORRECT TAPE NUMBER' or some other indication that tape mount was not completed; recheck what you typed in the mount command to make sure every number and letter was correct. If that is correct, call tape librarian, 7-4758, and ask her to verify the number and name of the tape. If she cannot help you, call Gary Smith and ask for help.

2. If output data does not look reasonable--for example, all or a lot of zeros in the various categories-call Gary Smith and he will recheck his output and take proper action.

```
      C TO GET CURRENT CENSUS OF VAE STUDENTS FROM GLOB FORMAT
0001        INTEGER STATE,ZIP,SEX,GRAD,SENIOR,RES,CURRIC,RANK,CMRHR,CMTHR,TERM
           1(2),PHONE(3),CITY(4),STREET(7),NAME(9),SECTON(40),MARK(40), WCODE(
           240),GRADX(40),HOURS(40),SUBJ(40),WEEKS(40),VAE(15,7)/105*0/,COURSE
           3(40),BIRTH(3)
0002        DATA IVAE/'VAE'/
0003      1 L=0
0004        J=0
0005        READ(1,2,END=50)ID,TERM,NAME,STREET,CITY,STATE,ZIP,PHONE,SEX,MARIE
           1D,BIRTH,GRAD,SENIOR,RES,CURRIC,MAJOR,RANK,CMHPT,CMRHR,CMTHR,CMHRB,
           2NO,(SECTON(I),MARK(I),WCODE(I),GRADX(I),HOURS(I),SUBJ(I), COURSE(I
           3),WEEKS(I),I=1,NO)
0006      2 FORMAT(2X,I9,I2,I1,9A4,6A4,A1,3A4,A2,A4,I5,2A4,A3,A1,A1,3I2,A1,A1,
           1I1,2X,A2,I3,I2,7X,7X,1X,1X,1X,1X,1X,1X,3X,8X,8X,8X,8X,F7.2,I3,I3,F
           25.2,I2,40(I5,A1,1X,A1,2X,A1,1X,I3,10X,A3,I4,2X,I2,36X))
0007        I=0
0008        IF(MAJOR.NE.00)GO TO 40
0009        DO 31 I=1,NO
0010        IF(SUBJ(I).EQ.IVAE)L=9
0011        J=6
0012        IF(L.EQ.9)GO TO 8
0013       31 CONTINUE
0014        GO TO 1
0015       40 IF(MAJOR.EQ.141)J=1
0016        IF(MAJOR.EQ.143)J=2
0017        IF(MAJOR.EQ.147)J=3
0018        IF(MAJOR.EQ.148)J=4
0019        IF(MAJOR.EQ.181)J=4
0020        IF(MAJOR.EQ.183)GO TO 7
0021        IF(MAJOR.EQ.195)GO TO 3
0022        IF(MAJOR.EQ.196)GO TO 3
0023        IF(MAJOR.EQ.400)GO TO 3
0024        IF(MAJOR.EQ.403)GO TO 3
0025        IF(J.EQ.0)GO TO 1
0026        IF(RANK.LT.6)GO TO 8
0027        IF(RANK.EQ.53.OR.RANK.EQ.60)GO TO 10
0028        IF(RANK.GT.50)GO TO 9
0029        IF(RANK.GT.5.AND.RANK.LT.50)GO TO 10
0030      8 I=0
0031        IF(RANK.EQ.01)I=1
0032        IF(RANK.EQ.02)I=2
0033        IF(RANK.EQ.03)I=3
0034        IF(RANK.EQ.04)I=4
0035        IF(I.EQ.0)GO TO 9
0036        VAE(15,J)=VAE(15,J)+1
0037        VAE(I,J)=VAE(I,J)+1
0038        VAE(6,J)=VAE(6,J)+1
0039        VAE(I,7)=VAE(I,7)+1
0040        VAE(15,7)=VAE(15,7)+1
0041        VAE(6,7)=VAE(6,7)+1
0042        IF(MAJOR.NE.00)GO TO 11
0043        GO TO 1
0044       11 VAE(I,5)=VAE(I,5)+1
0045        VAE(6,5)=VAE(6,5)+1
0046        VAE(15,5)=VAE(15,5)+1
```

```
0047              GO TO 1
0048            9 IF(RANK.EQ.51.OR.RANK.EQ.52)I=7
0049              IF(RANK.EQ.54.OR.RANK.EQ.55)I=8
0050              IF(RANK.EQ.57.OR.RANK.EQ.58)I=9
0051              IF(RANK.EQ.67.OR.RANK.EQ.68)I=9
0052              IF(I.EQ.0)GO TO 10
0053              VAE(I,J)=VAE(I,J)+1
0054              VAE(10,J)=VAE(10,J)+1
0055              VAE(I,7)=VAE(I,7)+1
0056              VAE(15,7)=VAE(15,7)+1
0057              VAE(15,J)=VAE(15,J)+1
0058              VAE(10,7)=VAE(10,7)+1
0059              IF(MAJOR.NE.00)GO TO 12
0060              GO TO 1
0061           12 VAE(I,5)=VAE(I,5)+1
0062              VAE(10,5)=VAE(10,5)+1
0063              VAE(15,5)=VAE(15,5)+1
0064              GO TO 1
0065           10 IF(RANK.EQ.12)I=13
0066              IF(RANK.EQ.06)I=11
0067              IF(RANK.EQ.53)I=12
0068              IF(RANK.EQ 60)I=13
0069              IF(RANK.EQ.00)I=13
0070              IF(I.EQ.00)I=13
0071              VAE(I,J)=VAE(I,J)+1
0072              VAE(14,J)=VAE(14,J)+1
0073              VAE(15,J)=VAE(15,J)+1
0074              VAE(I,7)=VAE(I,7)+1
0075              VAE(15,7)=VAE(15,7)+1
0076              VAE(14,7)=VAE(14,7)+1
0077              IF(MAJOR.NE.00)GO TO 70
0078              GO TO 1
0079           70 VAE(I,5)=VAE(I,5)+1
0080              VAE(14,5)=VAE(14,5)+1
0081              VAE(15,5)=VAE(15,5)+1
0082              GO TO 1
0083            7 DO 60 I=1,NO
0084              IF(SUBJ(I).EQ.IVAE)GO TO 61
0085           60 CONTINUE
0086              GO TO 1
0087           61 VAE(9,1)=VAE(9,1)+1
0088              VAE(10,1)=VAE(10,1)+1
0089              VAE(15,1)=VAE(15,1)+1
0090              VAE(9,5)=VAE(9,5)+1
0091              VAE(9,7)=VAE(9,7)+1
0092              VAE(10,7)=VAE(10,7)+1
0093              VAE(15,7)=VAE(15,7)+1
0094              VAE(10,5)=VAE(10,5)+1
0095              VAE(15,5)=VAE(15,5)+1
0096              GO TO 1
0097            3 IF(MAJOR.EQ.195)J=1
0098              IF(MAJOR.EQ.196)J=2
0099              IF(MAJOR.EQ.400)J=3
0100              IF(MAJOR.EQ.403)J=4
0101              VAE(5,J)=VAE(5,J)+1
```

```
0102                VAE(6,J)=VAE(6,J)+1
0103                VAE(5,5)=VAE(5,5)+1
0104                VAE(6,5)=VAE(6,5)+1
0105                VAE(5,7)=VAE(5,7)+1
0106                VAE(6,7)=VAE(6,7)+1
0107                VAE(15,J)=VAE(15,J)+1
0108                VAE(15,5)=VAE(15,5)+1
0109                VAE(15,7)=VAE(15,7)+1
0110                GO TO 1
0111             50 WRITE(7,80)TERM
0112             80 FORMAT(41X,'CENSUS OF VAE STUDENTS FOR ',I2,I1,' QUARTER',//,2X,
                   1'RANK',21X,'BED',12X,'DED',12X,'FLE',12X,'IED',9X,'SUBTOT',7X,
                   2'NO MAJOR',10X,'TOTAL',//)
0113                WRITE(7,51)((VAE(I,J),J=1,7),I=1,13)
0114             51 FORMAT(1X,'FRESH',20X,I3,6(I15),/,1X,'SOPH',21X,I3,6(I15),
                   1/,1X,'JR',23X,I3,6(I15),/,1X,'SR',23X,I3,6(I15),/,1X,'MAT',22X,
                   4I3,6(I15),/,2X,'SUBTOT',18X,I3,6(I15),//,1X,'MED',22X,I3,6(I15),/,
                   51X,'SPECIALIST',15X,I3,6(I15),/,1X,'DOCTOR',19X,I3,6(I15),/,2X,'SU
                   6BTOT',18X,I3,6(I15),//,1X,'POST BACH',16X,I3,6(I15),/,1X,'POST MST
                   7',17X,I3,6(I15),/,1X,'GUEST',20X,I3,6(I15),/)
0115                WRITE(7,53)((VAE(I,J),J=1,7),I=14,15)
0116             53 FORMAT(2X,'SUBTOT',18X,I3,6(I15),//,4X,'TOTAL',17X,I3,6(I15))
0117                STOP
0118                END

   TOTAL MEMORY REQUIREMENTS 001772 BYTES
EXECUTION TERMINATED
```

```
$RUN -LOAD# 1=*T* 7=*SINK*
EXECUTION BEGINS
```

CENSUS OF VAE STUDENTS FOR 724 QUARTER

RANK	BED	DED	FLE	IED	SUBTOT
FRESH	1	1	7	11	20
SOPH	5	0	22	28	55
JR	29	8	33	85	155
SR	44	4	35	60	143
MAT	6	5	2	14	27
SUBTOT	85	18	99	198	400
MED	64	5	37	64	170
SPECIALIST	4	2	0	5	11
DOCTOR	2	0	0	9	11
SUBTOT	70	7	37	78	192
POST BACH	0	0	1	5	6
POST MST	0	0	0	0	0
GUEST	0	0	0	0	0
SUBTOT	0	0	1	5	6
TOTAL	155	25	137	281	598

```
 STOP      0
EXECUTION TERMINATED
```

CENSUS OF VAE STUDENTS FOR 724 QUARTER

DED	FLE	IED	SUBTOT	NO MAJOR	TOTAL
1	7	11	20	0	20
0	22	28	55	0	55
8	33	85	155	0	155
4	35	60	143	0	143
5	2	14	27	0	27
18	99	198	400	0	400
5	37	64	170	1	171
2	0	5	11	0	11
0	0	9	11	0	11
7	37	78	192	1	193
0	1	5	6	3	9
0	0	0	0	10	10
0	0	0	0	5	5
0	1	5	6	18	24
25	137	281	598	19	617